THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. XLV. SATURDAY, AUGUST 2, 1884. No. 5.

ORIGINAL LECTURES.

DISEASE OF THE HIP-JOINT.

A Clinical Lecture,
Delivered at the Bellevue Hospital Medical College.

BY LEWIS A. SAYRE, M.D.,
PROFESSOR OF ORTHOPÆDIC SURGERY IN THE COLLEGE.

(Reported by Edward Develin, M.D.)

GENTLEMEN: The first case that I present to you today is that of a little child eighteen months of age suffering from hip-joint disease in the second stage. On account of the small size of the child when she was first brought to me, I deemed it inexpedient to attempt to apply the long hip-splint, and, therefore, directed her to be placed in the wire cuirass (Fig. 1) in which you now see her. When I first saw her there was an enormous abscess at the joint, which I believed, at that time, to be extracapsular. This was aspirated three times, in the hope that by this means, and by compression afterwards applied, the walls would become agglutinated, and thus all further trouble in regard to the abscess be done away with. I gave her the benefit of the doubt in this case, in order, if possible, to avoid an incision and the appearance of the resulting cicatrice from this treatment. It, however, was of no avail, the abscess still continuing to fill up. I therefore made a free incision down to the lower border of the abscess, by this means securing thorough evacuation of its contents; then washing it out thoroughly and inserting a rubber tube I maintained perfect drainage. As I remove this dressing, you observe that the parts are now in a healthy, granulating condition, and the limb is of normal size; perhaps somewhat smaller than the other, owing to its confinement.

Having now removed all dressing from the limb, I carefully lift it up from the cuirass, at the same time that I make a slight traction upon it. This you must be careful to do, otherwise you will cause pain by your manipulations. As I now hold the leg in this position, with my other hand under the thigh, I can make quite free motion within the joint in all directions without causing pain, as is shown by watching the face of the child.

I see no reason, therefore, why we should not secure the most satisfactory results in this case, and restore this child with perfect strength and motion in this now diseased limb. Before a year has expired I hope to be able to apply the long hip-splint, which I here show you (Fig. 2), in order that the child may secure all possible benefit from out-door exercise.

In relation to the wire cuirass in these cases of very small children suffering from hip disease, in which the long splint cannot be applied, I cannot speak too highly. By means of the screws attached to the footplate you can secure any amount of traction you desire, making your counter-traction, as is done in this case, by passing your roller bandage under the perineum and up over the handles of the instrument, which, you observe, are midway between the thigh and shoulder. In this position, the anus being directly over the opening in the back of the instrument, the child can relieve its bowels without disturbing its position, and the parts can be cleansed by the mother without soiling the clothing or person of the child, the instrument at that point being covered with rubber cloth. She can, as she is now

FIG. 1.

FIG. 2.

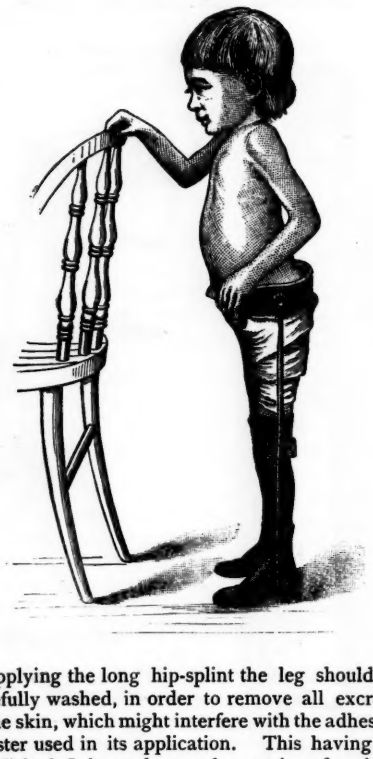
secured, be placed in the upright position as you now see me take her. In this position she can be placed by the window, in order to secure the benefit of the fresh air when the mother is not at liberty to take her out. The facility with which I can handle the child as she is now secured, without causing her pain, cannot fail to convince you of the advantages to be gained by the use of the cuirass in those cases in which the child is too small for the hip-splint to be applied.

[Note, thirteen months after.]—The child has now been wearing the hip-splint for some months. Three months ago she suffered from a severe attack of pneumonia, followed by acute nephritis. The attending physician gave his opinion that she could not possibly survive. At the present date, however, she has fully recovered, and is able to walk around out of doors, and

is brought to the city to my office once a week to allow dressing of the abscess. Prior to the attack of illness I have just mentioned a second abscess formed at the thigh, which I incised, freely washing out its contents, and dressing, as is my usual custom, with oakum and Peruvian balsam.

There is now excellent motion in the hip-joint, the progress of the disease having been arrested in spite of the unfavorable conditions induced by her recent illness. The prognosis is most favorable in this case. Fig. 3 shows condition of child at the present time, with long hip-splint applied.

FIG. 3



In applying the long hip-splint the leg should, first, be carefully washed, in order to remove all excretions upon the skin, which might interfere with the adhesion of the plaster used in its application. This having been accomplished, I then take two long strips of mole-skin plaster, about two inches in width, reaching from the upper part of the thigh on either side to just above the ankle. At the lower end of each strip you will notice there has been a buckle attached. Placing these strips of plaster on either side of the leg, I then take an ordinary bandage and bind very tightly around the leg from the ankle to the thigh. This bandage is to be removed in a few moments, but my object in applying it tightly, is to secure firm adhesion of the plaster to the skin; you notice that the better to secure this I am now rubbing over the plaster outside of my bandage, in order to secure this adhesion.

Now, removing this bandage you observe the plaster is firmly adherent. I never apply artificial heat to the plaster unless the air in the room is very cold; as I have so often seen the adhesiveness of the plaster entirely ruined by warming over a spirit-lamp, and the dressing required to be renewed in a few days; whereas the dressing which I am now applying will, I trust, remain for weeks, or even months.

I then take a flannel bandage, and commence to bandage the foot, gradually passing up the limb until I reach the upper third of the thigh; at that point I reverse the ends of my adhesive strips over the flannel bandage, and secure them with a few turns of the roller, thereby materially assisting in keeping the dressing in place. This dressing is precisely the same as that which was applied to the child one year ago, when she was placed in the cuirass. I should, therefore, have applied the splint without redressing, had it not required it. It has, however, given me the opportunity of showing you the manner in which I apply the same, preparatory to applying the long hip-splint.

You will notice that this long splint consists of a pelvis belt passing around the pelvis in such a manner that the *upper* edge of the belt is on a line with the crests of the ilia. There are also two perineal bands. Now passing from this pelvis belt at the side, in a line with the great trochanter, we have this side rod which is hollow and cylindrical; half way between the knee and ankle this rod ends, and admits a smaller rod which passes into it, and is regulated by a ratchet and key; the foot-piece at the lower end of this rod passes under the shoe, and a small leather strap there inserted is secured on either side by the buckles which are attached to the adhesive plasters secured as I have just shown you. There is also at the knee, you observe, a buckskin pad to assist in maintaining the leg in position; and when necessary a joint can be placed in the shaft of the splint at the knee, to allow of flexion when sitting down. This may be done when the active progress of the disease has been arrested and recovery approaching. I wish to draw your attention to the position of the perineal bands, as the instrument-makers will attach them at almost every conceivable place upon the pelvis belt where they are not wanted. Now, posteriorly, as you observe, these straps are wide apart, passing over the gluteal muscles. But anteriorly you notice they are much closer upon the belt, being only about three inches apart, and passing directly up on either side of the symphysis pubis. If the bands are placed widely apart anteriorly, they make compression upon the femoral vessels and press the thighs outwards. At the same time, the traction is not brought to bear upon the desired point.

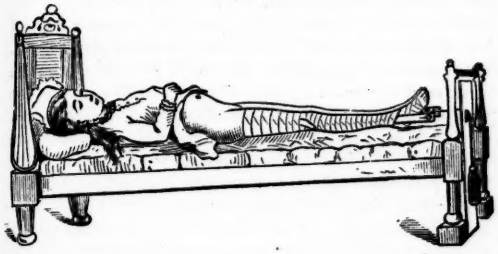
Having now secured the instrument upon the child, our next point is to make extension. This is accomplished by means of the ratchet and key here shown you. The extension is to be made to that point at which your patient states he feels *comfortable;* there you must stop and secure your extension by means of this little sliding catch upon the rod. Do not judge your extension when applied the next day by that made upon the preceding; do not count or mark the holes in the straps or notches upon the instrument, and take that as your guide; for leather will stretch, and you may not apply the instrument exactly as you did before; therefore, you will fail to secure relief if you make your extension to any set marks. *You must always be guided by the feelings of your patient.*

When you have applied one of these instruments to a child, and instructed the parents as to its mechanism;

you will often have them ask you to mark upon it how far they are to key out the rod in order to make extension. You must impress upon them the utter uselessness of this method, and insist upon extension being made until the patient states, that at one particular point of the extension he feels most comfortable.

At night when the child goes to bed the splint is to be removed, and the weight and pulley applied to the foot, as I have before stated. (Fig. 4.) In some cases, however, you may find that the patients will state that they

FIG. 4.



are more comfortable with the splint than with the weight and pulley, and will ask to be allowed to wear the splint in bed. I know of no reason why they should not do so if they desire, but, as a rule, the weight and pulley affords the same relief as the splint when it is properly applied. In such cases, therefore, examine carefully your night extension apparatus, and see that the bed is raised sufficiently to secure counter-extension; for it is on these slight details that the success of your treatment depends.

I probably could not choose a better time than the present to explain to you the application of the short hip-splint, so that you may compare the two instruments and their application.

The short hip-splint (Fig. 5), you observe, like the long one has a belt which completely encircles the pelvis. From the side of the splint passes down a rod which is composed of two pieces sliding within each other, and regulated by a ratchet and key as extension may require. This side rod passes down within a distance of one and a half inches above the condyle, so that the two flat curved bars which pass from this portion of the rod over and in front of the thigh cannot by any possibility press down upon the patella if the instrument is properly adjusted. There are also, as you notice, *two* perineal bands, as in the long hip-splint, and a strap going over the shoulder from the outer ends of the pelvis belt, to keep it at right angles with the body. At the ends of the lower bar, which passes in front of the thigh above the patella, are two buckles which are to secure the splint in position, from a piece of stout webbing attached to the plasters, which I will now show you how to apply.

The short splint is to be removed at night, but we must still maintain our traction upon the limb: to do this, the weight and pulley is applied as I have shown you in illustrating other cases. There is, however, a difference in the form and application of the adhesive plaster to the leg in this splint. I first take two long strips of adhesive plaster, which pass up the leg as in the long splint, but with this difference: they do not extend more than two or three inches above the condyles of the femur. These are secured with the roller bandage,

FIG. 5.

as I have before described, and are for night extension only. The next thing for us to do, is to apply the plasters

FIG. 6.

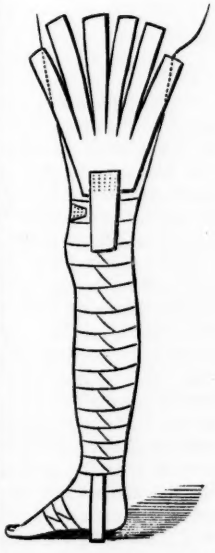
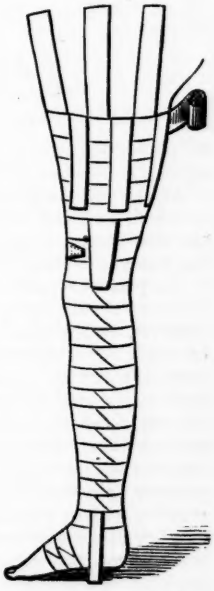


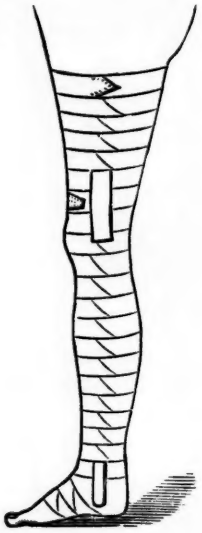
FIG. 7.



which secure the splint in position. These consist of two broad fan-shaped pieces of plaster split into five or six

tails (Fig. 6), except at the lower narrow portion, which is not cut. At that point about six inches of stout webbing is sewn firmly to the plaster. Having prepared these in this manner, you place the lower portion holding the tab, three inches above the condyle on either side; then carry the tails of the plaster up the thigh. My assistant then holding these in position, I commence at the lower end with a roller bandage, leaving my pieces of webbing outside and passing upwards, reversing the ends of the plaster over my bandage as I reach the upper part of the thigh (Fig. 7), and then, with a few turns of the bandage, I secure these reversed ends, and the dressing is complete. (Fig. 8.) In order to make

FIG. 8.



the plaster more firmly adherent, I then rub it into the skin by pressure upon the outside of my bandages.

We are now ready to apply the splint, although when practicable I prefer to wait a few hours, as the plaster has then become more firmly adherent, and is therefore less likely to slip when I make extension on the limb.

The pelvis belt and perineal bands are adjusted as in the long splint; before fastening the perineal bands, however, the splint is brought into place, and the tabs on either side of the thigh above the knee are passed over the roller and secured by the buckles on the inner and outer side of the curved bar which passes over and in front of the thigh just above the knee. These being securely fastened, the perineal bands are made secure, and the shoulder strap fastened so as to give equal pressure upon the outside perineal band, and I am then ready to make extension. This is done by the ratchet and key in the side rod; making the extension to the point where it affords the patient the most relief, as I have before explained to you when applying the long splint.

CASE II. *Hip disease: second stage.*—Female, aged twenty-one years. This patient comes from Connecticut. She states that two years ago she suffered from sciatica, the pain being intense in the left side, hip, and knee; at that time she was confined to her bed for five weeks, since that time she has been lame and unable to walk without crutches.

You observe that the patient bears the weight of the body entirely on the right limb; the left limb is flexed at the thigh and knee, the toes being turned outwards, this deformity would indicate disease of the hip-joint advanced to the second stage; namely, effusion within the capsule. The gluteo-femoral crease upon the left side has entirely disappeared, giving the natis upon that side a flat appearance, this, also, is characteristic of hip disease, although observable in other deformities. The moment we attempt to invert this left foot, you observe it causes a spasm of pain; by this action the capsular ligament was rendered tense around the neck of the femur, and by its pressure upon the inflamed parts induced this spasm. We now take hold of the thigh just above the knee, and make traction upon it *in the line of the deformity;* I wish you to watch carefully the manner in which this is done, as some gentlemen by their manipulation increase the severity of the disease by making rude traction upon the limb, omitting to make their extension in the line of the deformity, and by such omission increase the pain and irritation at the seat of disease. There is no necessity to cause pain in your extension; it is just the reverse of that, as you can now see by the expression of the face of this patient; apply your force in such a manner as to relieve the inflamed parts from pressure; so that if by this means you relieve your patient it is equally of diagnostic importance as though you had caused pain. I can tell the moment that relief is afforded, by the relaxation of the muscles beneath my fingers; and now with the limb extended in this manner we can make slight motion in the joint without causing pain, but the moment the extension is released the muscles instantly assume their rigidity, and, as you observe, it is impossible to move the limb in the least degree without causing pain, and the whole pelvis moves as if the joint were anchylosed.

It is therefore necessary to place the limb in the extended position, and retain it there with traction maintained by artificial means, until the fluid within the joint is absorbed, keeping the patient in bed, and making the extension by means of the weight and pulley, a sling or cushion being used to support the leg in order that the extension may be made in the line of the deformity, the limb being gradually brought parallel with the body as the effusion within the joint subsides; a blister in the meantime being placed behind the trochanter major and repeated as often as necessary. After the effusion has been absorbed and the limb brought to the normal position, my long or short splint is then to be applied to maintain the extension, and thus prevent the attrition of the articulating surfaces. The patient can then go out of doors in order to exercise the limb, and secure the benefit of the fresh air, so that her general health will not suffer in any degree.

[Note.]—This patient was placed in the hospital and extension maintained for three weeks as stated above, the effusion within the joint having then been absorbed sufficiently to allow of the application of the splint. Her improvement was so rapid and satisfactory, that

I applied the short hip-splint in this case, as I judged it would fully answer all purposes required. The following week she left for her home in Connecticut, still improving; the treatment to be continued by her attending surgeon.

CASE III.—This child which I now bring before you was presented at our clinics one year ago, suffering from disease of both hip-joints; the disease being caused by a fall in which the legs were thrown widely apart, and occurring some three years previous.

A year ago, when this girl was presented to us, the left leg was in the second stage of hip-joint disease, being flexed at the thigh at an angle of 45°, strongly abducted and rotated outwards with eversion of the foot, giving us the characteristic deformity of the second stage of the disease. The right hip-joint had probably sustained less injury than the left, the disease in this joint being in the first stage.

I at that time directed that the child be placed in bed and traction made upon both limbs by means of the weight and pulley, it being applied to either limb in the direction of its deformity; counter-extension being secured by the weight of the body, by means of raising the foot of the bed six inches.

This treatment has been faithfully followed out, and with the most satisfactory results in the right limb, as a complete recovery has been secured and we have now perfect motion within the joint. The disease in the left hip-joint, however, had reached such an advanced condition of the second stage that it could not at once be arrested, and rupture of the joint capsule followed a few days after I saw her. In consequence of this condition we have here a slight arrest of the growth of the limb, and in all probability some absorption of the bony structures of the joint itself.

I can now, while making traction upon the limb, bring it to a right angle, with adduction, abduction, and rotation without causing any pain; thus showing that a cure can be effected in this case with probably perfect motion, although, of course, the limb will be shortened. Since treatment was first commenced in this case the child has grown four inches in height; the disease, however, when I first saw her had advanced to such a stage that the effusion within the joint has since caused rupture of the capsule, and the fluid has now escaped into the surrounding tissues; so that the disease in this left leg has reached the third stage, giving us, when extension is discontinued, flexion and adduction of the limb with rotation inwards, and inversion of the foot, Now, when the rupture of the capsule occurred the child experienced relief from pain, and there also occurred, a change in the position of the limb, it then assuming the deformity of the third stage of hip disease, namely, adduction of the thigh with inrotation of the limb and inversion of the foot.

I have told you that the capsular ligament of the hip-joint has been ruptured in this case; hence we have then the fluid which it previously contained, flowing out into the surrounding tissues, resulting in the formation of an abscess with the accumulation of a large quantity of pus; this abscess we will now aspirate, and, if its contents are sufficiently fluid to pass through the needle, we can remove this matter, which is a foreign body. (The aspirator was then used, one ounce of pus being withdrawn.) You observe that as I withdraw the needle I slip my thumb over the wound and then close it with a piece of adhesive plaster, thus preventing the admission of air to the cavity. We now take a roller bandage and bind firmly around the thigh and pelvis so as to bring the walls of the abscess in apposition; and it is possible that we may by this means cause adhesion of these walls. In this case, as the contents of the abscess were easily evacuated, we may eventually effect a cure by this means, and thus avoid making a free incision; whereas, had it been a semi-fluid mass containing flocculi and sloughs of connective tissue, our best treatment would then be freely to open and wash out the abscess.

We will now apply the long hip-splint, the leg having been brought perfectly straight by extension and counter-extension; the child can then go out of doors and secure the benefit of the fresh air, by this means keeping up her general condition. It may, however, be necessary to aspirate this abscess more than once, and if this method fails, a free incision should then be made, as I have before stated.

CASE IV. *Hip disease: third stage.*—The child which I here present to you was also sent to me from Connecticut, and I bring him here to show you the deformity which characterizes disease of the hip-joint in the third stage, and which the rupture of the capsule and absorption of the osseous structures will produce. He is now four years of age, and the parents attribute this difficulty to falling from his bed, shortly after which he first commenced to complain of pain in his knee. He was afterward taken to the Massachusetts General Hospital, where he was treated with a fixed apparatus for disease of the knee-joint.

As he now lies upon the table, my assistant holding the pelvis perfectly still, with the spinous processes of the vertebral column touching the table, we begin to realize the extent of the deformity here produced. For you notice, in order to place the back and pelvis in their normal position, and which they now represent, I am compelled to adduct and inrotate the limb across its fellow just above the knee over the thigh, thus giving us inversion of the foot, and at the hip you will notice an undue prominence of the trochanter major, arising from this same inrotation of the limb. Now, as long as I maintain the limb in this position, at the same time making slight traction upon it, he is free from all pain. This then is your course to pursue; you yourself cannot hold the limb for any length of time, but you can apply mechanically such means as will secure the same result.

If now my assistant releases his hold upon the pelvis and I bring this diseased limb parallel with the other one, and press the popliteal space upon the table, you notice that as soon as I commence this the back begins to form a complete arch, at the same time the pelvis tilts forward in order to accommodate itself to the deformity I just now showed you. This present position could be maintained only for a few moments without causing great suffering to the patient, and that, of course, I wish to avoid. You notice that, as I now relax my long hold, the leg commences to rise and is gradually drawn over the opposite limb, while the back sinks down to its normal position. The patient knows very readily the position in which to place himself in order to secure the most ease, and thus it is in the de-

formed position which I first showed you, that he will naturally place himself.

What we want to do is to find the exact line of the deformity; to do this you must fully understand the anatomy of the human body. If there is nothing abnormal, the thigh can be brought down until the popliteal space touches the table and the pelvis remains perfectly still; but now in trying to make the same motion with the diseased limb and yet retain the pelvis in the same position, we are compelled to flex, adduct, and invert the limb; the popliteal space cannot therefore be brought down to touch the table without the arching of the spine and tilting of the pelvis. This is a typical case of hip-joint disease in the third stage.

This child has been sent to me to have the long extension splint applied, but in his present condition it is not applicable. It is now necessary to place the child in bed and secure extension by means of the weight and pulley in the line of the deformity, gradually changing that line, as I have before stated. By this means, in a few weeks you may perhaps bring the limb straight; you can then apply the long splint to the greatest advantage. Now, it may be, that this abscess at the joint will require to be freely opened. I will, however, try the aspirator first and endeavor to secure absorption before resorting to this operation.

If, after proper extension has been applied and thorough drainage of the abscess has been secured, the disease still progresses, you will then need to exsect the hip-joint.

In this case I shall send the child to his home, giving such suggestions to the medical attendant in charge as the treatment which his condition may require.

The instruments which I have to-day shown you can be procured from my instrument-makers, Messrs. Reynders & Co., 303 Fourth Avenue. I mention this, as so many physicians coming from a distance frequently are at a loss to know where they can secure the splints which I use.

ORIGINAL ARTICLES.

ON THE CHLORIDE OF GOLD AND SODIUM IN SOME NERVOUS AFFECTIONS.[1]

BY ROBERTS BARTHOLOW, M.D., LL.D.,

PROFESSOR OF THERAPEUTICS AND MATERIA MEDICA IN THE JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA.

IN that curious accumulation of mediæval learning, *The Anatomy of Melancholy*, gold is mentioned as a valuable remedy in the treatment of that affection. The eccentric author got his notions from the alchemists, and the physicians of the chemical school then rising into prominence. From the earliest times, gems and precious stones, and, to a less degree, the noble metals, were supposed "to free the mind, and mend the manners." Thus Chaucer, who died in the year 1400, æt. 72, in his Canterbury Tales, describes in the Prologue "a doctour of phisike," who

> "Knew the cause of every maladie,
> Were it of cold, or hote, or moist, or drie,
> And where engendred, and of what humour,
> He was a veray parfite practisour."
>
> . . . . . .
>
> "And yet he was but esy of dispence!
> He kepte that he wan in the pestilence,
> For gold in phisike is a cordial;
> Therefore he loved gold in special."

The Arabian physicians, afterwards the Italians, and later still the Montpellier school, recognized the virtues of gold in certain mental and nervous diseases. The best account of gold, from the historical standpoint, and, also, of its physiological and therapeutical properties, is that given by Trousseau and Pidoux. These authors availed themselves freely of the labors of Chrestien, of Montpellier, whose researches have proved the most important yet undertaken.

Gold, in the form of powder, and, also, of chloride, was the subject of investigation by Hahnemann, whose "provings" corresponded, in the main, with the ideas then entertained of the actions and uses of gold. Since then, the homœopathists have employed gold in two classes of cases: hypochondriasis and increased discharge of urine. I once heard an original homœopathist, a high-potency person, testify regarding the happy influence of the 30th dilution of gold on the mental condition of an old man affected with senile dementia. When the astute attorney on the other side, got the homœopathic doctor to make a calculation of the quantity of gold actually received by his patient, the jury wore an incredulous look, very depressing to the opposing counsel.

From the various sources of information now available, chiefly clinical, we learn that the preparations of gold possess those properties formerly entitled *alterative*, and now usually designated by the phrase *promoting tissue-metamorphosis, or metabolism*, and the power to give stability to nervous matter, or the antispasmodic property. There are three several heads under which it will be convenient to group for my purpose the therapeutical powers of gold and its preparations, quite irrespective of its supposed physiological actions:

The so-called alterant effects;

The actions on the nervous system;

The urino-genital properties.

Before undertaking to present the details under these several heads, it may be best to say something of the preparation used. I have always preferred the double chloride of gold and sodium since I learned how little diffusible the chloride is. Injected subcutaneously in animals, the chloride seems not to diffuse through the vessel-walls, and when introduced into the blood tends to clog the kidneys. On the other hand, the double salt is readily diffusible. I have no experience with metallic gold or the oxide. Notwithstanding the chloride is so little diffusible, when taken into the stomach, effects are produced. It is probable that in the reactions which ensue the double chloride—of gold and sodium—is formed.

The usual dose of the gold and sodium chloride is one-twentieth of a grain. In this quantity twice or

[1] A preliminary note read before the American Neurological Association.

three times a day, it appears to have, as its primary action, the power to promote constructive metamorphosis, to improve the globular richness of the blood, and to increase tissue-strength. However, kept up for a time, tissue-changes become more rapid, and waste occurs in excess of repair. The tissues yielding most readily are, as might be expected, the connective, and especially those of pathological formation. Hence the utility of this remedy in *sclerosis*, whether nervous, hepatic, or renal. Especially in posterior spinal sclerosis, and in chronic interstitial nephritis, have I found the gold salt very efficacious. I am far from believing that lost parts may be restored, although some of my critics appear to think my credulity limitless. If used in locomotor ataxia, early and persistently, it has seemed to arrest the disease. It is true, since the publication of Strumpf's results with the faradic brush, I have not failed to make use of this method, but that it alone will stop the morbid process, I do not find. Before the electric brush had been employed systematically, I had witnessed the best results from gold and sodium chloride. During the last ten years, I have seen many cases in consultation, but of five in my immediate charge which I have followed, and in which the treatment was begun with the onset of the second stage; in three the disease seems not only to be arrested, but the condition improved. The knee-jerk, however, remains absent or feeble. The others are manifestly improved. Thus far, no persistent gastric or intestinal disorder has been caused by the remedy.

Excellent results have followed the use of the gold chloride in many cases of fibroid kidney, not only in my own hands, but in the care of other practitioners. Unquestionably the homœopathists, guided in the use of this agent by the symptom—increased urinary flow, have had good results from the first dilution, but this topic is foreign to my present purpose.

There is a form of hypochondriasis, coincident with the onset of degenerative changes in the cerebral vessels—and it may be dependent on these changes—in which the gold and sodium chloride is very effective. It must be persistently used, and after a time the uneasiness in the head, the vertiginous and other abnormal sensations subside, the mental depression at the same time clearing up. Dr. Bauduy, of St. Louis, kindly informs me that he has had the same good effects. It seems to me that the ancient notion that gold is a "cordial" to the mind in cases of melancholy, is also supported by modern experience.

In certain affections characterized by spasm, as asthma, laryngismus stridulus, and singultus, this remedy acts surprisingly well sometimes. A physician with large experience in a malady which I do not see at all now-a-days—pseudo-croup, or laryngismus—informs me that he employs no other remedy, and his patients get speedy relief. There are various cognate affections in which, no doubt, it will be found in a high degree useful.

The same powers render gold a remedy of great value in certain urino-genital affections. I have referred to chronic interstitial nephritis. I could enumerate many instances of the more chronic cases of albuminuria, in which the curative effects of this remedy have been most conspicuous; but I am here concerned with the merely nervous affections. There are certain cases of sexual debility, accompanied by an extreme degree of hypochondriasis, which are amongst the most difficult and unsatisfactory with which we have to deal. No remedy has seemed to me so serviceable as this in this troublesome condition of things. In simple sexual debility, its administration promotes activity. In dysmenorrhœa with scanty menstruation, and in chronic metritis, accompanied by these symptoms, the persistent administration of gold and sodium chloride has done much good.

I present these notes now, in advance of more elaborate treatment, to awaken a more general interest in the actions and uses of gold. My observations indicate the direction in which this remedy promises to be useful, but wider and more varied experience is necessary to fix its real position. That it possesses very valuable powers, is certain, but it remains to be seen how far my belief is justified in the results of many cases seen under diverse conditions.

TREPHINING FOR INSANITY, CONSEQUENT UPON A DEPRESSED FRACTURE OF THE SKULL.[1]

BY WILLIAM A. BYRD, M.D.,
OF QUINCY, ILLINOIS.

LA MOTTE, in 1705, trephined a patient for epilepsy, according to Dr. Gross; then that method of treatment slumbered for ninety-nine years, to be revived by Mr. Cline, of London, but the operation did not come prominently before the profession until Dr. B. W. Dudley of Lexington, Kentucky, published, in 1828, five cases he had operated upon for that disease.

Insanity as a sequel to epilepsy is not so rare as to cause, in my belief, the application of any remedy for it when resulting from epilepsy, or from such a cause as would produce epilepsy, to be looked upon as irrational practice. Yet when I searched the works on surgery in my possession, written by some fifteen different distinguished gentlemen, I found trephining for insanity from traumatism of the skull mentioned by but one, *Gross' System of Surgery*, 6th ed. vol., ii. p. 89, as follows: "Prof. Briggs had, up to 1882, trephined the skull for traumatic epilepsy in 28 cases, with complete recovery in 22, partial relief in 3, and no benefit in 1. For insanity caused by injury of the skull, he performed the operation in 2 cases, in one successfully, and in one followed by death." I wrote to Dr. Briggs, who kindly answered as follows:

"The cases have only been reported in my clinical lectures, which are published from time to time in our journal. I will send you the manuscript notes of the lecture in one of the cases, taken by a student. The other case was that of a little boy whose photograph I send you, exhibiting the seat of fracture, etc.

"He recovered his faculties after the operation. His symytoms were those of furious mania; fighting,

[1] Read before the American Surgical Association, May 2, 1884.

biting, and scratching every one with whom he would come in contact. Having a constant disposition to escape from his parents and hide himself. There was a peculiar disposition in this case, as well as in the first, and, also in another which I have since operated on, of keeping the head lower than the body, The favorite position of this boy was with his body bent over a chair, the head resting on the floor. I have only operated upon one case since my report to Dr. Gross. The case was that of a man who had received a gunshot wound just above the ear, fracturing and displacing the bones in an irregular manner. The removal of the point of irritation relieved him of his lunacy. When I meet you I will give you the cases in full, so that you can utilize them."

The report of the lecture of Dr. Briggs, describing his fatal case, reads as follows:

"The patient is a young man who, before his affliction, enjoyed good health, but his condition now is such as to excite the warmest sympathies of even the coldest among us. Five years ago he received a severe blow from a stone, on the skull, fracturing the parietal bone, a little below the protuberance, and to the right side, producing a broad, depressed fracture. Since that time he has degenerated into a condition of lunacy. His imbecility is so great that absolutely he can do nothing. Left alone his head hangs, his hands fall listlessly, and the vacancy of his face tells of the deep gloom that has settled upon his mind. He eats mechanically. All his functions are performed after a fashion, nor, indeed, can it be said with certainty that he is conscious of anything. At times, however, he becomes furious. During these fits he raves like a madman, and is so dangerous that handcuffs and other mechanical appliances have been found necessary to restrain him. As these attacks wear off, he relapses into his former condition of complete imbecility, so that, while he does exist, we may say that he does not live, that he merely vegetates.

"Applications ere now have been made to me to operate for his relief; but after examining him, and carefully reviewing his case, I decided that he was not a fit subject for the operation. Recently his condition has become so much worse that his family were induced to make another application, and at their urgent request a consultation of four of the faculty was held to consider the case. The decision was to operate with the full understanding, by these interested in him, that the remedy was a desperate one and only warranted by his deplorable condition.

"I cannot say that I think he will be benefited; it is one of those cases in which I cannot venture an opinion. But you saw the case on which I operated last month, and how great was the relief. True, that was a comparatively recent case, while this is an old one. And herein lies one of the chief dangers, for the circulation in the brain having accommodated itself to the abnormal condition of the parts, it is again disturbed by the operation, and again has to reaccommodate itself to the new order of things; and is required to do this in an abnormal and depressed condition of the system.

"Again, the patient himself cannot help us. He has no will-power, nor has he any thought for himself, or any consciousness of his condition. And, finally, he has but little vitality. His whole system has been depressed for a long time, and it may be that he has not even sufficient recuperative energy to rally from the immediate shock of the operation.

"He may be greatly benefited; I trust that he will be; he may recover from the operation, but with his condition unimproved; he may die during the operation, or he may die from its later effects.

"Thus you have the case before you. You see that it is one that no man would seek, but rather avoid as long as he could with justice. Still, after the operation has been decided as warrantable by a number of his professional brethren, a true surgeon could not fail to see his duty. Hence, it is with a full sense of the gravity of the case, and with a due appreciation of the solemnity of the occasion, on the issue of which hangs so much for the patient and his family, that I now proceed to operate."

The skull was then trephined, four crowns of bone being taken out, and the intervening portions of the bone cut out with the bone-nippers. The bone removed included all of the depressed portion:

"The operation was carried out as indicated, the patient being under ether, and the carbolized spray being used continuously. Two small branches of the occipital artery were ligated by Prof. C. S. Briggs, who, together with the hospital staff, assisted in the operation. Very little blood was lost, and the dura mater was untouched. A swall wisp of carbolized tow was placed in the wound to keep it partially open, thus permitting free drainage. The flap was secured by a single suture. A carbolized compress of tow was then applied, and lightly confined by a bandage. The patient was finally placed in the strait-jacket so that he might not do himself any injury on returning to consciousness.

"December 14th. I have to announce to you that the patient whom I trephined for lunacy is dead. The operation in every respect was performed in a correct way, and for a time after he appeared to be doing well. The next day he suddenly became much worse; had a rigor followed by great depression, but no fever, and he died suddenly that night."

I have reproduced nearly the whole of Prof. Briggs's lecture for its lucidity of style and correct reasoning. Many points have been dwelt upon by him that will not be necessary for me to consider a second time,

September 11, 1883, Mr. John P. B., of Colchester, Illinois, consulted me in regard to the advisability of having an operation performed to relieve his wife of insanity. He was accompanied by his wife and her father. The lady was a brunette, thirty-one years old, well nourished, of prepossessing appearance, and medium size. She had been insane for five years without any prolonged lucid intervals. For the last two years she had been in the asylum at Jacksonville. Eighteen years before she had been kicked by a horse, causing a depressed fracture of the skull at about the centre of the right frontal eminence. The depression was about an inch in length running diagonally downwards toward the nose. She recovered rapidly from the injury, there being at no time any symptoms of compression. In time she became somewhat erratic in her disposition, and gave evidence of being easily disturbed in her sleep. Still she made fair progress in her studies and became a good housekeeper. She married and had five children, three of them being born after she became insane. She was very seldom violent in her insanity, talked incessantly and used the most obscene language conceivable. The insanity had come on slowly and had been progressive. Her family and other physicians had advised the husband and father to remove her from the asylum and try to have her cured by an operation.

Sept. 13, 1883, at Blessing Hospital, in Quincy, she was brought under the influence of an anæsthetic, composed by measure of one part of ethyl bromide, three parts of chloroform, and four parts of alcohol, given by Dr. Charles Wesley Rook, and with the assistance and in the presence of Drs. I. T. Wilson, R. Woods, C. B. Ellis, and H. Hatch, the depressed portion of the skull was removed by taking out three pieces of bone with the trephine from a triangular space including the depression. The bone in the spaces between the openings made by the trephine was removed with the bone-nippers, and the edges of the opening rounded off and smoothed, making a circular opening in the skull of about an inch and a half in diameter. The bone was nearly half an inch thick, whereas, normally, at that place it is very thin.

The integuments that had been raised by a T-flap were brought down and together with catgut sutures, except at the lower angle, where a small rubber tube was inserted for drainage. She rested well the day following the operation in bed. The next morning, Sept. 14th, she was up and dressed, and but slightly incoherent.

From this day until Sept. 30th, she was perfectly rational and coherent.

On the evening of the 30th, she was excited, but not obscene or wild. The wound had healed perfectly; there had been no fever or other untoward circumstance at any time during the progress of the case.

On the morning of October 1st, her husband came to take her home. When she saw him she became very greatly excited and incoherent, using very obscene language, but at times would appear quite rational. He insisted upon her going home with him, much against my will as I felt that she needed still further the attention she could only get from trained nurses. After her arrival at home her husband wrote me that she became quite unmanageable, and continuing so, I advised that she be sent back to the insane asylum at Jacksonville, which was done.

The subjoined letter from Dr. Carriel will give an idea of her condition at the present time:

"Replying to your inquiry, I will say Mrs. John P. B., is now, and has been since her return, much deluded, and disturbed in mind: in fact, she has not been as well since her return as she was before leaving. I do not attribute this condition as resulting from the effect of the operation, but as the natural tendency of the disease. I see little reason to hope she will ever be better"

Thus there are reported in this paper four cases, all that I can learn. Of this number one died, one improved for a very short time and then became progressively worse, and two entirely recovered. The record, though short, shows, I think, that the operation of trephining should be resorted to oftener than it has been heretofore, and much earlier. The hope of recovery from earlier operative procedure is good and the condition of hopeless insanity is such that not one of us but would personally be willing to submit to any procedure for cure.

ON THE USE OF THE OBSTETRICAL FORCEPS AS A SPECULUM AND PROTECTOR TO THE VAGINA IN OPERATIONS UPON THE FŒTUS IN UTERO.

BY JOSEPH PRICE, M.D., AND G. G. FAUGHT, M.D., OF PHILADELPHIA.

WHILE fully subscribing to Baudelocque's dictum, that "the forceps has been more injurious than useful to woman," we are persuaded that it is the abuse, rather than the intelligent use of them, that has made this saying possible. We might have some hesitation in adding to the already seemingly replete literature of the obstetrical forceps—in which every obstetrician, and many not laying claim to such a title, has been in print with instructions how, when, and where to use them; we might be deterred by the seeming self-sufficiency of the mass of the profession, as shown in the societies by the levity with which questions relating to their use are treated, from claiming for them a use in addition to that of tractors and compressors; were it not that we find the records of gynecology scored over and over again with cases, the sad history of which, is the result of their reckless and unintelligent use.

The late Dr. John Parry gives the mortality of craniotomy as 37½ per cent.; according to Dr. Agnew (*Surgery*, vol. ii. page 821), "a fatality quite as great as that resulting from Cæsarean section." As a careful perusal of the writings of Schroeder, Tait, and others, shows how often this operation is followed by genital fistulæ, we have good reason to believe that lacerations and contusions of the soft parts are no mean factors in accounting for this heavy mortality.

The design of the present article is to call attention to the use of the forceps in craniotomy, as a protection to the maternal soft parts, and by retracting the vagina (and, if needful, the cervix) enable the operator to use craniotomy instruments safely and expeditiously. It seems to have been lost sight of by the profession, that the primal use of specula were for exactly this purpose; Abulcasis[1] so using them as early as the twelfth century.

In using the forceps after the manner referred to in the title, when the destruction of the fœtus is clearly and fully indicated, a pair of forceps, as wide in the blades as the diameters of the pelvis will permit, are applied in the ordinary manner, and used for fixation and compression of the head, while the vault is perforated and broken or folded up. If preferred by the operator, the blades may be separated to their respective sides of the pelvis, and held by assistants, recrossing and locking them when necessary to make traction and compression.

Writers on obstetrics report cases[2] in which the head was perforated, after ineffectual tractions had been made with the forceps, without removing the instrument, and the delivery subsequently accomplished safely. The use of the forceps in all these cases was, however, accidental—that is, the operator perforated the head, after he had ineffectually used the forceps

[1] Quoted by Schroeder as Abulcasein.
[2] Hodge, Syst. of Obstet., pages 252, 272, etc.

as tractors, allowing them to remain on merely to save time and trouble by their subsequent reapplication. Dr. Rigby, of England, and M. Cazeaux, in France, recommend the forceps as extractors in embryotomy. This article claims the great value of the forceps, when craniotomy is designed, applied *intentionally, prior to perforation*, with the object of affording much greater facility to the operator in his manipulations, and of protecting, almost absolutely, the maternal soft parts from the injuries so common in the hands of even skilful operators, from slipping of instruments, etc. A prominent New York practitioner, who boasts "3000 cases and a year at Vienna," records the slipping of a cephalotribe *eight* times, the operation being finally completed with a blunt hook. Cases are known in which the cervix has been entirely cut away, and in which, in trephining the base of the child's skull, the mother's sacrum has been sawn into. Such injuries would certainly be done away with, if the operator has the vaginal tissues widely dilated by means of the forceps.

To represent the utility of the forceps under such circumstances, we cite the following cases:

CASE I.—M. B., æt. 21; primipara. In this patient the pelvis was of a masculine type, the child's head unusually ossified, and its dimensions large, absolutely and relatively. When Dr. Price saw her, she had been in labor for a long, but indefinite time—as the pregnancy was illegitimate, she had attempted to conceal the fact that she was in labor—and the child was dead. The hand was presenting at the vulvar orifice, which was very much swollen, and the woman's vital forces failing. The hand and arm were returned to the uterine cavity, and the head brought into position. As there was no expulsive effort whatever, the forceps were applied; traction, however, failing to engage the head, considerations involving the safety of the mother demanded prompt removal of the child. Without removing the forceps, craniotomy was quickly performed, after the method described. The mother's soft parts were entirely uninjured, and the woman made a prompt and satisfactory recovery. It seems scarcely necessary to state that version was not performed or attempted in this case, because it was believed that the safety of the mother would be greatly compromised by turning and dragging through contracted and inflamed tissues a large, *still* child.

CASE II.—Mrs. D., æt. 28; second labor. The first labor, two years previously, had been a protracted forceps delivery. The present labor was seen in consultation; it was a summit presentation, and various forceps had been already unsuccessfully applied. A further attempt by Dr. Price was equally unsuccessful in engaging the head, its diameters being at least an inch greater than those of the pelvic outlet. The forceps being *in situ*, a large male fœtus was removed after perforating and crushing the head. The patient's recovery was all that could be desired, and she has since borne a normal child, the labor being easy.

CASE III.—A. G., æt. 22; primipara. Extreme angular curvature of the spine, and the pelvis was narrowed in the conjugate diameter to nearly two and a half inches. The head presented; the occiput was situated posteriorly and unengaged. Dr. Faught applied the forceps (Davis's), but was unable to move the head. Drs. Hampton and Price were called in consultation, and craniotomy was decided upon. At the suggestion of Dr. Price, the forceps (Hodge's) were first applied, the blades being separated to their respective sides of the pelves, and used as a speculum during the subsequent operative procedure. Except for a slight tear of the perineum made during the delivery of the shoulders, this was happily accomplished. The child was a male, and above the average size. The patient's recovery was uninterrupted and satisfactory.

MEDICAL PROGRESS.

REACTIONS OF ALBUMEN.—In a paper recently presented to the Academie de Médécine, M. E. Grimaux showed that solutions of amido-benzoic colloid acquire, by the addition of a small quantity of salt, the property of coagulating under the influence of heat, and he has determined that this phenomenon of coagulation depends both on the proportion of the coagulating agent and on the dilution of the liquid. The study of the reactions of thin solutions of albumen, shows that they become coagulable under the same conditions as the amido-benzoic colloid.

If to dilute solutions of albumen are added small quantities of salts, sodium chloride, sulphate of lime, sulphate of magnesia, hydrochlorate of ammonium, etc., they become coagulable by the action of heat. By the dilution of the albumen, as in the solutions of amido-benzoic colloid, the quantity of water added counteracts the coagulating influence of the salts.

Carbonic acid acts in the same manner as the salts. It is sufficient to cause a current of carbonic acid to pass into albumen to cause the liquid to coagulate at a low temperature. The same thing is seen, as already said, with the amido-benzoic colloid solution. This solution, to which a small quantity of sea-salt is added to cause coagulation in the cold, becomes coagulable when it is saturated by a current of carbonic acid. Albumen to which water is added is not modified. If, on the contrary, these solutions are heated, the albumen is modified. If solutions of albumen, containing one to one hundred of dry materials, are heated to 130° F., a few flocculi are seen to separate. The liquid, filtered clean, is not clouded on boiling, and only becomes opalescent. The action of carbonic acid, cold, causes a gelatinous precipitate which is reduced in a current of air. This precipitate disappears when the liquid is placed in a vacuum, above a solution of potash, or when, after having collected and washed it with water charged with carbonic acid, it is suspended in aërated water.

Dilute acetic acid causes a gelatinous precipitate easily soluble in an excess of acid, reappearing on neutralization with an alkali, and also dissolving in an excess of the latter. The addition of phosphate of soda to the solution of albumen, previously warmed, hastens the precipitation by carbonic acid, but not by acetic acid, and the liquid possesses the reactions of solutions of casein. Albumen, therefore, modified by the action of heat, becomes coagulable by heat when small quantities

of sea-salt, sulphate of lime, sulphate of magnesia, etc., are added to it.—*L'Abeille Méd.*, June 30, 1884.

PORRO OPERATION.—DR. TUZZI performed this operation on June 19, at the Maternity in Milan. The patient was in the ninth month of utero-gestation. The operation has been thus far successful for both mother and child.—*Gazz. degli Ospitali*, July 6, 1884.

SURGICAL TREATMENT OF GALL-STONE.—MR. LAWSON TAIT has recently carried out his proposal to crush gall-stones by grasping the duct with the forceps. He crushed the stone with great ease by two strokes of the forceps. It was about the size of a cherry, and, after it was broken, the fragments dispersed, and they have given no trouble at all. Since the operation, only a very small quantity of mucous fluid, faintly tinged with bile, has come through the fistula, and the patient's motions are now quite normal in color. He intends to close the fistula in a few days.—*British Med. Journ.*, July 12, 1884.

M. PASTEUR'S HYDROPHOBIA EXPERIMENTS.—The experiments which M. PASTEUR is reported thus far to have made are said to be an unbroken success. Fifty-seven dogs have been the subjects of investigation. Of these, nineteen were rabid, and by these thirty-eight healthy animals were bitten under uniform conditions. Of the thirty-eight, one-half the number had been previously inoculated, or "vaccinated," with attenuated virus; the other half had not. The latter, without a single exception, died with unequivocal signs of rabies, whereas the nineteen others remain as well as ever. They will be watched for a year by veterinary surgeons to see whether the inoculation holds good permanently or only temporarily. If rabies be not spontaneous in its origin, and if the experiments of Pasteur all turn out successful, there seems no reason why canine madness should not be extirpated from our midst.—*Lancet*, July 12, 1884.

CHROMIC ACID AS A CAUTERANT IN DISEASES OF THE NOSE, PHARYNX, AND LARYNX.—In a recent communication on this subject to the Société française d'Otologie et de Laryngologie, DR. HERING refers first to the fact that chromic acid acts on albumen very much in the same manner as does nitric acid; it coagulates it, and also the mucous secretions, the saliva, and the gelatinous tissue of the bones. This explains the action of chromic acid on the pituitary membrane. Being used for preserving and hardening anatomical specimens whose form and structure it is desirable to maintain, it may be considered as an antiseptic. It arrests putrefaction in blood, muscles, and the urine. According to Dugal, its effect on the infusoria is greater than that of carbolic acid. It has been given internally by Bonnefont, Vincent, and Heyfelder, only in cases of inveterate syphilis, and Güntz has recently published a new method of treating syphilis by excluding mercury and administering chromic acid water.

It is well known that workers in chromic acid frequently have marked effects from its action on the nose, pharynx, and respiratory organs. A peculiar form of rhinitis is developed, the last effect of which is the destruction of the nasal septum and perforation of the cartilages. Curiously enough, Delpech-Hillairet states that snuff-takers are exempt from these effects. When applied to the healthy skin the acid only causes a yellow tint; but with the slightest excoriation pain and caustic effects follow.

To cauterize any particular spot, a small piece of charpie, covered with chromic acid, is placed on it. In a few seconds the charpie is transformed into a blackish mass, and at the same time there is some production of heat. The charpie then acts on the tissues in the same manner as the thermo-cautery, forming an eschar, the elimination of which, proceeding from the periphery to the centre, commences in from five to eight days. The falling of the eschar leaves a suppurating wound. Concentrated aqueous solutions, of one-half or one-third, do not cause pain when applied to condylomata. These simply retract and fall off without hemorrhage. The application being repeated, they disappear entirely, and leave a small ulcer, which readily heals.

When applied in a pure form, chromic acid is a powerful corrosive agent. As a corrosive, it is used for removing condylomata, papillomata, warts, lupus, carcinomata, and malignant ulcers. It may also prove useful in removing telangiectases and indurations of the cervix uteri. There are two principal objections to its general use in affections of the nasal mucous membrane. First, the inconvenience as to the quantity and the operative procedure, and, second, the fear of chromic acid poisoning. But these are due to the methods in ordinary use, and not to the remedy. Hering advises the following: Over an ordinary lamp one heats a small crystal of the acid on the end of a silver probe. When heated cautiously this crystal loses its water, and forms a viscid, thick mass, which soon hardens on the end of the probe. If the heat acts for too long a time, or too suddenly, the surface of the crystal is transformed into a green layer, friable and porous, and having no corrosive action. This method enables the operator to judge of the time for the application and the amount of pressure to be used in cauterizing a part. A glass rod may be used instead of a silver probe, or a piece of platinum or iron wire may be used. By this method very simple instruments are required. The operator touches lightly, and several times, the surface to be acted upon, and soon sees a small spot streaked with yellow, which gradually enlarges and becomes an eschar. To get a less cauterant effect, it is sufficient to plunge a glass rod into the brownish deposit at the bottom of a chromic acid bottle. This deposit is very aqueous, and less active than the burnt crystal.

When the chromic acid cautery is applied to the buccal and pharyngeal mucous membrane, only very slight pain is produced. Hering has never had a case of chromic acid poisoning after even frequently repeated cauterizations. He always follows them up with a washing of pure water, which is continued as long as the water comes away with a yellowish tint. When there is any danger of some of the chromic acid getting into the stomach he gives the patient a weak solution of bicarbonate of soda. When the cautery is applied to the larynx the patient should be made to cough and expectorate immediately after the operation.

Hering states that of all the means thus far used by him in the treatment of nasal catarrh, he has not found one which is equal to chromic acid in rapid and energetic action, especially in cases of thickening of

the mucous membrane accompanied by obstruction and an abundant muco-purulent secretion, *without excessive redness of the mucous membrane.* The nose should be first washed out with a weak, tepid solution, and then the chromic acid applied to the tumefied parts on one side only. After this water is quickly thrown in. If the first cauterization does not produce the desired effect, the yellow eschar should be removed with the pincers, and a second application made, or several applications may be necessary.

In cases of adenoid hypertrophies Hering has had the best results with chromic acid. He has also been successful in destroying the pedicles of polypi, and in treating pharyngitis granulosa and pharyngitis hypertrophica lateralis, and hypertrophy of the tonsils. Care must be used in the last case when there is a cavity in the gland, lest a portion of the cauterant remain in the cavity. This treatment is not applicable to indurated hypertrophy of the tonsils. He has used the acid in the larynx, with success, in cauterizing the seat of two mucous polypi of the chords, which had been removed by Störk's forceps; also in cases of laryngeal ulcerations and in ulcerations of the chords, whether tubercular or syphilitic. The application causes scarcely any pain, and stops the cough. In all cases the acid must be applied with great care.—*Rev. Mens. de Laryngol. d' Otol. et de Rhinol.*, May and June, 1884.

LAPAROTOMY FOR VOLVULUS.—This operation was performed at the Ospitale Maggiore, in Bologna, on April 19, by DR. MEDINI. The patient was doing well on June 11.—*Gazz. degli Ospitali*, June 11, 1884.

CHANCROUS LYMPHATIC ABSCESSES.—Lymphatic abscesses, says DR. VERDIER, are a rare, but still possible complication of simple chancre. It is difficult to determine precisely the etiological conditions which are involved in their formation. From a pathogenic point of view, they are the result either of the introduction of the chancrous poison into the lymphatics, or of an intense lymphangitis which succeeds the irritation caused by the chancrous ulceration. Inoculation establishes the diagnosis between the two forms: positive in the first case, and negative in the second.

In all probability suppuration occurs at the interior or in the walls of the lymphatic vessels. The ulceration resulting from the spontaneous or surgical opening of these abscesses rapidly takes on the form of chancrous ulceration.

As regards the treatment, it differs but little from that of the simple chancre. Cauterizations give excellent results. In most cases nitrate of silver will suffice. For topical dressings, iodoform, aromatic wine, and calomel and pyrogallic acid pomades are very useful.—*Revue de Thérap.*, June 15, 1884.

ABSCESS OF COWPER'S GLANDS.—M. VERNEUIL reports the case of a man, æt. 62 years, who came under his care at La Pitié. For some time he had had symptoms of dysuria. These finally became very pronounced; urination became extremely painful, and the desire frequent. Examination showed a stricture of the membranous portion of the urethra.

M. Verneuil diagnosticated stricture of the urethra, and ordered a bath and a purgative, and next day passed a No. 3 bougie, the size being then changed every two days, until a No. 9 was passed. This was soon followed by an attack of orchitis, and this by an exudation into the tunica vaginalis, which afterwards became encysted. Dilatation of the urethra was kept up, and the patient left the hospital able to pass a No. 15. He returned in about three weeks, with a large swelling of the right side of the scrotum; this was due to abscess formation, which opened in five days. Three days afterwards the patient died.

The autopsy showed the bladder small and retracted, and its walls thickened. A No. 7 sound could be passed *per urethram*. Near the prostate a small quantity of pus was found. On dissection, a small cavity was found, filled with phlegmonous, greenish pus. It was situated at the posterior part of the urethra, related anteriorly with the membranous portion of the urethra, and behind with the bulb of the urethra and the perineal muscles, above with the prostate, and below with the bulb. In the opinion of Verneuil and Cornil, this was a case of abscess of Cowper's glands.—*Progrès Méd.*, June 14, 1884.

WATER AS A DIURETIC.—In an article on the action and use of diuretics, in the *Practitioner*, May, 1884, DR. T. LAUDER BRUNTON says that water is, perhaps, the most powerful diuretic we possess, although fewer experiments have been made with it upon animals than with the others. The diuretic action of water drunk by a healthy man is very marked, and it appears impossible to explain its elimination by a mere increase in blood-pressure, whether general or local. It has the power of increasing tissue-change, and thus multiplying the products of tissue-waste which result from it, but it removes these waste products as fast as they are formed, and thus, by giving rise to increased appetite, provides fresh nutriment for the tissues, and thus acts as a true tonic. In persons who are accustomed to take too little water, the products of tissue-waste may be formed faster than they are removed, and thus accumulating may give rise to disease. If water be freely drunk by such persons, the product of waste will be removed, and health maintained or restored. Many gouty persons are accustomed to take little or no water except in the form of a small cup of tea or coffee daily, besides what they get in the form of wine or beer. In such people a large tumbler of water drunk every morning, and especially with the addition of some nitrate or carbonate of potassium, will prevent a gouty paroxysm. Still more numerous, possibly, is the class of people who arise in the morning feeling weak and languid, more tired, indeed, than when they went to bed. Many such people are well fed, they sleep soundly, and it seems almost impossible to believe that the fatigue which they feel in the morning can result from imperfect nutrition, more especially as one finds that after moving about, the languor appears in a great measure to pass off. It seems that this languor must depend upon imperfect removal of the waste products from the body, as we know that the secretion of urine in healthy persons is generally much less during the night than during the day. Such people should drink a tumbler of water before going to bed in order to aid the secretion of urine and of the waste products during the night. In some cases, though not in all, the result has been satisfactory, and possibly

might have been still more so, if the bicarbonate and nitrate of potassium, which are so useful in cases of gout, had been added to the water.

Lately a plan of treating gout by draughts of water at intervals during the day has been a good deal employed, and is in many cases successful. The following is the diet used along with this treatment by a medical friend:

7.30 A.M. Ten fluidounces of very hot water. 8 A.M. Breakfast: equal parts of weak tea and milk, a small quantity of white sugar, a slice of fat bacon without a strip of lean, bread, and fresh butter. 1 P.M. Milk-pudding, rice, sago, tapioca, macaroni, or blanc mange, and small biscuits with butter, ten fluidounces of hot water. 4 to 5 P.M. Ten fluidounces of hot water. 6 P.M. Dinner: white fish or fowl (usually boiled), greens, bread, no potatoes, claret seven fluidounces. 8 to 9 P.M. Ten fluidounces of hot water. 11 P.M. Ten fluidounces of hot water.

If he indulges either in meat or game, or drinks copiously of claret, or omits one or two glasses of hot water, he feels gouty and gravelly next day. It is obvious that by this plan of treatment, in which the ingestion of nitrogenous food is most strictly limited, at the same time that every facility is given for the elimination of the products of nitrogenous waste by the large quantities of hot water drunk in the course of the day, the accumulation of waste in the tissues ought to be most effectually prevented.

THE THERAPEUTICS OF PUERPERAL RUPTURE OF THE UTERUS.—DR. T. KRONER gives a table of 47 cases of rupture of the uterus, 19 being complicated, 10 uncomplicated, and 18 doubtful cases, all the cases having occurred during and since the year 1873. Of the complicated cases, 11 died—3 in twenty-four hours, 1 in thirty hours, 1 in twenty-one hours, 1 in thirteen hours, 1 in eight hours, 1 in a "short time," 1 in three days, 1 in five days, and 1 in seven days. Of the uncomplicated cases, 5 died—1 "soon," 1 in six hours, 1 on the next day, 1 in three days, 1 during labor. Of the 18 doubtful cases (doubtful as regards peritoneal complications), 9 died—1 in twenty-four hours, 1 in twenty-two hours, 1 in two hours, 1 in twelve hours, 1 in an hour and a half, 1 in forty hours, 1 in half an hour, 1 in three days, and 1 time not stated. In the whole number of cases only one primipara is mentioned, although in some of the cases no mention is made of the number of labors. Of the cases in which this is mentioned, rupture occurred 4 times in 2-paræ, 3 times in 3-paræ, 8 times in 4-paræ, 3 times in 5-paræ, 3 times in 6-paræ, 2 times in 7-paræ, 1 time in an 8-paræ, 3 times in 9-paræ, 1 time in a multipara. Rupture occurred 3 times in one patient, with recovery. Rupture followed the administration of ergot in 2 cases.

Of the whole number of cases, therefore, there were 25 deaths, and 22 recoveries. The fact that there were so many recoveries makes the tables especially interesting. Of these, 8 were cases of perforating rupture, with partial or total extrusion of the fœtus into the abdominal cavity. The shortest time of recovery without drainage was eighteen days; with drainage, fourteen days; the longest without drainage was seven weeks; with drainage, nine weeks. It would seem that good natural drainage, by a compress around the abdomen, is all that is necessary.

Besides the cases tabulated, Kroner reports a personal case—3-para, rachitic—in which rupture took place one hour after the rupture of the membranes. The child was delivered dead. The placenta slipped into the abdominal cavity, between the anterior uterine wall and the abdominal wall, and was removed with the hand. The uterus was washed out with warm carbolized water. The after-treatment consisted in the administration of opium, ice-bags over the abdomen, warm fomentations, and mild laxatives. The patient had diffuse parametritis, and an attack of remittent fever. The temperature became permanently normal in five weeks, and the patient was well in seven.

In none of the cases was the abdominal cavity opened. The usual treatment was, in the main, that used by Kroner in his successful case, local bloodletting being also used in some cases.—*Centralbl. für Gynäk.*, June 14, 1884.

EXTERNAL ŒSOPHAGOTOMY.—At a meeting of the Moscow Surgical Society, DR. A. S. KNIE (*Letopsis Khirurgitches Obshtchest.*, No. 8, 1884) related the case of a man aged twenty-two, who swallowed a piece of bone during a hasty dinner, and in whom, eight days later, œsophagotomy was successfully performed after all other attempts at dislodging or extracting the foreign body had utterly failed. The swallowing of solid food became impossible; that of fluids painful. The patient considerably lost flesh and grew weak from insufficient nutrition, sleeplessness, and fever, and began to expectorate a fetid purulent discharge, stained with blood. A sound detected that the foreign body was impacted at the level of the manubrium sterni. On the ninth day Dr. Knie, assisted by Drs. A. Belaieff and W. Schkott, made an incision along the internal edge of the left sterno-cleido-mastoid muscle, from the cricoid cartilage down to the sternum, and found his way to the œsophagus between the cervical vessels and the larynx. While the operators were examining the gullet with the fingers, fetid pus and mucus began to escape from the wound, thus clearly showing that a perforation already existed. The hole being enlarged, the foreign body was (with considerable difficulty) extracted by means of forceps. It proved to be a piece of bone 3 by 2 centimetres, with four very sharp angles, and rough surfaces. Under antiseptic after-treatment, the œsophageal fistula closed on the fifteenth day, and the patient was discharged cured four weeks after the operation. After an able general discussion of cases of foreign bodies in the gullet, the author strongly insists on the necessity of energetic treatment. Touching the results from external œsophagotomy for foreign bodies, Dr. Knie estimates the recoveries at about eighty per cent.—namely, of thirty-three cases collected by König in *Deutsche Chir.*, Fasc. 15, p. 120, twenty-six were successful; to these the author adds his case and two successful cases of Monastyrsky, in the *Vratch*, No. 6, 1882.—*London Medical Record*, June, 1884.

TRACHEOTOMY IN CHILDREN UNDER TWO YEARS OF AGE.—This is the subject of a recent inaugural dissertation by GUSTAV CHAYM. Trousseau took the position

that in children under two years of age tracheotomy for diphtheria was contraindicated on account of the undesirable consequences.

At Prof. Küster's suggestion, Chaym collected material on this subject—almost one thousand cases. As regards the mortality, there were fifty-six cases of tracheotomy in children one year old; eighty-four per cent. died, and of nine hundred and twenty-one of two years of age, eighty-five per cent. died, while the average mortality of tracheotomy for diphtheria fell to between sixty-seven and seventy-five per cent. As to the mooted question whether the operation gives better results in hospital or private practice—it seems that they were better in the latter. The causes militating against the success of the operation in these young subjects are, the slight power of resistance of very young children, the occurrence of dentition, the disposition to reflex cramps, the difficulty of properly nourishing them, the extreme mobility of the trachea, the weakness and narrowness of the air-passages, and the consequent dangers of wounding the œsophagus and other important anatomical structures.

Howard Marsh states that tracheotomy on a young child with a short and fat neck is a most difficult and tedious operation. For the *technique* of the operation, Chaym recommends the high operation, which, by Bose's oblique section of Hüter's thyro-laryngeal fascia, gives room enough, and also advises section of the cricoid cartilage. A canula of 4 mm. is also recommended. The after-treatment must be conducted with the greatest care. For troubles of deglutition the temporary tamponade is recommended, the best being the glycerine-wadding above the canula, as used by Israel. —*Deutsche med. Wochenschr.*, July 3, 1884.

THE CARRIERS OF INFECTION IN PUERPERAL FEVER.—LOMER read a paper on this subject before the Gesellschaft für Geburtshilfe und Gynäkologie, on March 28, 1884. Pathologico-anatomical researches show these to be chain-forming, round, and non-moving microorganisms, in the diphtheritic layers of the uterine mucous membrane, in the uterine tissue, the peritoneal exudation, the lymph-spaces of the diaphragm up to the pleural cavity, in the kidneys, and in every other organ.

In two puerperal fever patients, Lomer found them once in pemphigus vesicles in large number fourteen days before death, in the other case four days before death, in the blood. After death they were found in all the organs.

The culture-experiments of Dr. Franovik, not yet concluded, show that the pure cultures differ both from the micrococci of diphtheria found by Löffler, and from the erysipelas-cocci found by Fehleisen. The inoculations of pure cultures made by Fränkel and Doléris have not, up to the present time, given constant and agreeing results.

Besides the chain-forming micrococci, other microorganisms were found in puerperal fever, which seemed to indicate mixed infection. Clinically, however, these cases did not differ from the others in which only the chain-like micrococci were found. Lomer further reports three cases of puerperal fever, in which the micrococci were not found even after the most careful search made in the Royal Health Office.—*Deutsche med. Wochenschr.*, July 3, 1884.

EXTIRPATION OF THE KIDNEY.—At the meeting of the Medico-Chirurgical Society of Glasgow, on March 7, 1884, DR. MACEWEN showed a patient from whom the right kidney had been extirpated. The patient was admitted into the wards in an emaciated, semi-delirious condition, with high temperature and weak pulse. The history available at the time was of the most meagre description, and to the effect that he had been troubled with a urinary affection for about a year previously. His urine was loaded with pus. On examination, microscopically, a few tube-casts containing pus-corpuscles were seen, along with numerous crystals of phosphate of lime. There were dulness and swelling in the right renal region, which was painful on deep pressure. The diagnosis was renal calculi with abscess of the kidney.

Within the first twenty-four hours of his admission into the hospital, it was evident that he was sinking, and that something would require to be done at once for his relief. It was thought that the renal calculus might be removed while the abscess could be opened and drained. The renal calculi were removed; one from the pelvis of the kidney of irregular form, one of its projections situated in the ureter; the other from the substance of the gland. The kidney was found to be riddled with abscesses, and as it was apparent that it could no longer perform its secretory functions, it was removed. The patient recovered from the operation with remarkable rapidity.

DR. GAIRDNER said that the course of events in these cases was something like this. Along the ordinary channel pus was discharged for a considerable period for a greater or less period, this going on interminably. If the patient does not succumb, then there came a time when the kidney was structurally and functionally destoyed. If an opening were now made externally, pus was discharged in this way, and this might go on indefinitely. The next step was that of waxy degeneration, or Bright's disease. It was perfectly clear that, if they were satisfied that the kidney was permanently disabled, they might save the patient's life by having recourse to the operation for its removal.—*Glasgow Med. Journ.*, July, 1884.

THE ANTI-EPILEPTIC ACTION OF BROMIDE OF POTASSIUM.—In the *Neurologisches Centralblatt*, No. 2, 1884, DR. P. ROSENBACH has an article on this subject. Bromide of potassium administered to animals decreases the excitability of the cerebrum, so that stronger currents are necessary in order to call out, through irritation of the motor centres, the minimal disturbances of the corresponding muscle groups. This has already been ascertained by Albertoni. Rosenbach now concludes that the cerebral cortex is the point of origin of epilepsy and of epileptic attacks, and has undertaken to determine upon what part of the cerebral mass bromide of potassium acts more particularly. With this view he irritated the motor region of the uninjured gray matter, and after destruction of the same, both before and after using the drug. From this it was determined that on sufficient intoxication with bromide of potassium (in dogs) the excitability of the cerebral cortex diminished, or entirely disappeared, whilst the excitability of the underlying substance remained almost unchanged.—*Deutsche med. Wochenschr.*, July 3, 1884.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

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SATURDAY, AUGUST 2, 1884.

CHOLERA DISINFECTION.

WE have given briefly in these columns the means to be employed to prevent the introduction of cholera into the United States, and we now invite the attention of our readers to the best means of combating the disease should it once obtain a foothold here. It is understood, from what has already been said, that municipal cleanliness is absolutely necessary to prevent the germs of the disease from multiplying outside the human body, and the only question with which we have now to deal is, What is the best plan that can be adopted to destroy the germs as they pass from the cholera-infected person?

Cholera is not transmitted by contact, but by an organic infecting matter, passed with the evacuations of those affected, which must gain entrance into the intestinal canal to produce cholera in another. In this lies the whole secret of an effectual preventive treatment, if we can destroy the organic infecting matter the instant it has passed from the patient, cholera cannot spread; or, what amounts to the same thing, if we can prevent the infecting matter of the cholera dejecta from reaching the intestines of other persons, we prevent them from getting cholera. Our efforts in this direction, therefore, constitute the true preventive treatment of this disease. If we can only preserve the drinking water from contamination, it is impossible for cholera to become epidemic. The leading principles upon which we must rely for effecting this object are, first, to destroy the organic infecting matter as it passes away from the patient by means of a solution of corrosive sublimate, or of sulphate of iron, or by some acid reagent, taking care that the evacuations thus treated are buried in the earth away from wells or sources of water supply; and secondly, to disinfect or destroy all articles of clothing, furniture, or, in fact, anything to which the choleraic discharges could adhere.

The popular idea of a disinfectant is a something which will destroy a "bad smell," while the fact is, such destruction may not affect the fomites of cholera, which are almost odorless. A cholera disinfectant must be a germicide, or it is worthless.

The simplest and cheapest disinfectant for this purpose is a solution of bichloride of mercury or a saturated solution of sulphate of iron (copperas). A solution of bichloride of mercury is readily made by adding an equal quantity of common salt as a solvent, and dissolving in water in the proportion of 1 gramme of the mixture to 1000 cubic centimetres of water, or 1 ounce to 8 gallons of water; and a saturated solution of copperas by dissolving all the powdered copperas a given quantity of water will take up. Both of these disinfectants are entirely odorless, and the former colorless.

A small quantity of either of these solutions should be placed in the vessel receiving the discharges from a cholera patient, and another portion poured over them immediately after the vessel is used. Then the contents of the vessel should be emptied into the water-closet, buried, or, better still, thrown into a furnace. All clothes or other domestic articles that can be washed which have been contaminated, should be soaked in a solution of one or the other of these disinfectants, and if the furniture or floor has received any of the fomites, it too should be thoroughly washed with the bichloride solution. These solutions can be used about the premises, if necessary, with a sprinkling-pot, and all suspicious places wet down and thoroughly disinfected.

There are many other cheap disinfectants, but they are open to the objection of disagreeable vapors, such as chloride of lime, carbolic acid, sulphurous acid, etc. The bichloride solution, besides being odorless, is no more dangerous than any other disinfectant that can be named, while it is more cleanly and quite as readily prepared, as well as being cheaper than the now favored carbolic acid.

Isolated hospitals for cholera patients who are unable to provide for themselves, and their immediate removal to these hospitals upon the appearance of the first symptom—the *malaise* which usually precedes cholera—would simplify the management of the disease, and with absolute cleanliness, proper disinfection, a well-regulated diet, and unpolluted water, all fear of an *epidemic* of cholera in the United States may be dismissed, even should it escape our quarantine guards and appear in our midst.

ANTIPYRIN: THE NEWEST ANTIPYRETIC.

THE search for a substitute for quinine, although not successful in the main object thus far, has been fruitful in the discovery of new remedies. Amongst these may be mentioned, resorcin, quinoline, pyrocatechin, hydroquinone, and kairin. All of these are synthetical products. The last mentioned of this group, kairin, has proved remarkably effective as an antipyretic. All of them have been successful in varying degrees as antiseptic and antipyretic remedies, but they do not reach the peculiar eminence hitherto attained by quinine only. But this partial success has greatly stimulated the productive activity of chemists engaged in these researches, and their efforts have been rewarded by the discovery of antipyrin. This very appropriate designation is applied to an artificial alkaloid produced synthetically by Dr. L. Knorr, of Erlangen, by the action of acetic ether on aniline. It is also obtained by oxidation from quinoline or chinoline, one of the antiseptics mentioned above. It has been patented by Dr. Knorr, for whom it is manufactured by Messrs. Meister, Lucius, and Brünnig, industrial chemists.

Antipyrin occurs in the form of a white crystalline powder, having a slight aromatic odor, and a somewhat bitter taste, which may be effectively disguised by solution in some medicated water or in wine. It is readily soluble in water, in the proportion of one to three. The dose for an adult as an antipyretic is from 15 to 30 grains, given at intervals of an hour, until 75 or 90 grains have been taken. This quantity can be administered without causing inconvenience except, in rare instances, vomiting, according to Dr. Ferdinand May, who has experimented with it in the Municipal Hospital of Cologne, and publishes his results in the *Deutsche med. Wochenschrift*, No. 24, 1884. In the same issue of this journal we find a paper by Dr. C. Rank, of Stuttgart, on the use of antipyrin in febrile affections, employed chiefly by the hypodermatic method. Its ready solubility, and the absence of any resulting important local injury, render it especially available for this mode of administration.

The first investigations of the physiological action of antipyrin on animals and on man, were made by Filehne, and appeared in the *Zeitschrift für klin. Med.*, Band vii., Heft 6. The papers quoted above have followed. Besides these, a short note on some clinical experiences with the new remedy appears from Dr. Paul Guttmann in the *Berliner klin. Wochenschrift* for 19th of May, last. From these sources, we lay before our readers, a succinct account of the action and uses of a remedy which appears to be, from the present state of opinion, the nearest approximation to a substitute for quinine hitherto discovered.

The effect for which it has thus far been employed is the antipyretic, and in various acute and chronic febrile affections. The influence on the temperature of fever has been constant, although not to the same degree in all individuals. The maximum depression of temperature is attained in from three to five hours after the commencement of the treatment. The effect is maintained for from seven to nine hours, and in some instances is prolonged to twenty hours. The pulse decreases in frequency as the temperature declines, but the two functions do not maintain an absolute ratio, and the respiration is not affected. Children and weak adults are more readily influenced by it, and therefore require less of the medicament to produce a given result.

Rank embodies in some formulated conclusions the results of his observations. He finds that antipyrin is an antipyretic of the first importance in all the acute febrile affections; that by subcutaneous injection the effects are produced more decidedly and more promptly than by the stomachal administration, and that a less quantity of the remedy suffices, thirty grains being equal in power to twice that quantity given by the mouth; that a concentrated solution, 15 grains in 8 minims of water, can be employed by the hypodermatic method, without any local injury or accident, and that about twice the quantity of antipyrin produces the effects of a given quantity of quinine, for which it appears to be an efficient substitute.

The charts which illustrate May's articles exhibit, in the clearest manner, the constant influence of antipyrin on the temperature and pulse. As compared with kairin, it presents an important advantage which Guttmann has emphasized: the rise of temperature which comes on after the depression is not so abrupt, nor is it preceded by a chill, the maximum heat being attained in about the time occupied in reaching the minimum produced by the administration of the remedy. Although it is conceded by the observers quoted that whilst the pulse and temperature maintain a certain regular ratio, the respiration is not affected. One of the observations given by May is opposed to this view, for after forty-five grains of antipyrin the number of the respiratory movements fell from 30 per minute to 18, in the same ratio as the decline in the pulse and temperature. Further investigation is needed to decide this point.

Kairin and quinine are the agents with which antipyrin is to be compared. Guttmann, who makes some observations on the comparative antipyretic action of these three remedies, concludes that antipyrin is superior to kairin, but that in corresponding quantity quinine is more effective than antipyrin. Thus far we have had no observations on the use of the new remedy in malarial fevers, which will be the *experimentum crucis*, as regards its curative powers. There can be no advantage in the administration of

antipyrin, as respects price, at the present time. A large demand will, of course, lessen the expense of production, but as a monopoly will exist in the person of the holder of the patent, the price can be artificially maintained.

In concluding, we cannot withhold the expression of our conviction, that an American physician would not have patented such a beneficent discovery. We are sure, had he done so, that he would experience the reprobation of the whole profession, a fact which shows that if we may not possess the scientific training of our German colleagues, we are more mindful of certain ethical principles.

DRAINAGE OF CEREBRAL ABSCESS.

IN a timely article contributed to the *American Journal of the Medical Sciences* for July, DR. FENGER and DR. LEE, of Chicago, record a most interesting case of abscess of the brain the result of shot wound, which terminated in recovery after trephining, draining, and washing out the cavity with antiseptic solutions. The result affords a capital illustration of the fact, which few surgeons of the present day will deny, that a cerebral abscess should be treated upon the same principles as an abscess of any other organ or region.

One of the great difficulties in the treatment of cerebral abscess consists in locating the precise seat of the lesion. Not a few cases have been reported in which, after the skull had been opened, the knife or trocar missed the abscess, and the patient died unrelieved. This embarrassment may be obviated by multiple exploratory aspirations, conducted with a syringe, provided with a needle four inches long, with a rounded instead of a cutting point, through which division of small bloodvessels is obviated. The procedure, which was originally practised by Renz, in 1867, was adopted in the case under consideration, and the needle served as a guide, along which a pair of forceps was passed for the evacuation of the pus.

It would appear from this paper, as well as from one published by Dr. Amidon in THE MEDICAL NEWS for June 21st, that up to the present time only three cases of cerebral abscess have been treated by drainage. In that of Burchard, the tube was inserted along the track of the projectile; in that of Fluhrer, also one of pistol-ball wound, the projectile was extracted through a counter-opening, and a tube passed through and through; while in the case of Fenger and Lee the drain was carried into the cavity of the abscess through the track made by the forceps to evacuate it.

That drainage should in similar cases be practised on general principles, is attested by the remarkable fact that the three cases in which it was resorted to recovered. The truth of the matter is that the sooner we learn to regard a cerebral abscess in the same light as an abscess elsewhere, the better it will be for our patients. To tap and drain a collection of pus in the brain is not a bold or hazardous procedure; the danger consists in letting Nature pursue an unaided course; and in the present state of our knowledge of the advantages of antiseptic surgery, the practitioner will be deemed bold indeed, who idly waits for "spontaneous resolution."

ANTISEPTIC OBSTETRICS.

THE subject of antiseptic obstetrics has attracted so much attention lately that our readers will be glad to know the methods adopted, and the results obtained in the famous Rotunda Hospital of Dublin. The Master, DR. MACAN, in his last annual report states that during the year ending November, 1883, 1090 women were delivered, and only 6 died; the mortality was, therefore, 0.55 per cent., or 1 patient in 181.6. The usual mortality in childbed, as estimated by both the late Dr. McClintock and Dr. Matthews Duncan, is 1 in 120 in private practice.

For the prevention of septic infection, the students and nurses are required, before examining a case of labor, to wash their hands in a 1 to 40 solution of carbolic acid, and carefully use a nail-brush, afterward dipping them in a 1 to 1000 corrosive sublimate solution. Further, in order to lessen the frequency of vaginal examinations, the students are taught to palpate the abdomen, and thus to recognize not only the presentation, but also the exact position of the child's head, back, and limbs.

As soon as the child is born, the patient is turned upon her back to prevent the entrance of air into the uterus, and her genitals are never touched after delivery except in case of hemorrhage, ruptured perineum, or retained placenta. Before stitching a ruptured perineum, the vagina is washed out with the 1 to 40 carbolic acid solution; and if the hand is introduced into the uterus, the uterine cavity is similarly washed out, or with a 1 to 2000 corrosive sublimate solution.

The vagina and external genitals are carefully washed before every operation, and the uterus syringed out afterward, and a pessary containing one drachm and a half of iodoform passed to the fundus, and left there.

The tubes used for vaginal or uterine injections are of glass, one for each bed, and they are kept in carbolized water. To prevent the entrance of air, which may be immediately, or remotely dangerous, the old India-rubber siphon syringes have been replaced by irrigators which act by gravity. Gum-elastic catheters have been banished, and only silver instruments are used.

Dr. Macan holds that if the prophylactic precau-

tions taken during labor are sufficient, there can be no necessity for any prophylactic antiseptic injections, whether vaginal or uterine, in the puerperal state, and he never allows them to be used either in hospital or in private practice. The external genitals are not even washed with antiseptic solutions, but with warm water, a piece of oakum instead of a sponge being employed. No antiseptics are used on the napkins applied to the external genitals.

The very low mortality observed in the Rotunda under this method of treatment is strong testimony in its favor. Nevertheless, we do not believe the question of childbed mortality can be settled by one year's experience in a single hospital, for just as there are practitioners who claim to have attended five hundred, or even one thousand labors without seeing one case of puerperal septicæmia, so there are years when the mortality of maternities may be very slight. A question like this must be decided by observations continued for a long time, and by inductions based on a large number of cases.

THE TREATMENT OF ABORTION.

DR. MACAN, in the report to which we have just referred, states that during the year 16 cases of abortion were admitted to the hospital. The treatment was expectant as long as possible, and in none was the vagina plugged, but in case of excessive hemorrhage before the cervix was sufficiently dilated to allow removal of the ovum, the cervix was plugged with a tupelo tent, or dilated with Hegar's instrument, and the ovum removed. When any part of the ovum remained, causing putrid absorption or hemorrhage, the uterus was well washed out with the corrosive sublimate solution, the curette used, and then the corrosive sublimate again, and in septic cases, in addition, an iodoform suppository was introduced.

The record of Dr. Macan's practice is a contribution to the subject of the proper management of inevitable abortion, a topic that has attracted much attention in recent years in this country. The profession, in fact, is yet divided in opinion, some advocating immediate and active interference—attacking *vi et armis*, that is with big and little curettes—and emptying the uterus as promptly as possible; while others more conservative, or at least less radical, prefer an expectant course, letting their action depend upon events, persistent or severe hemorrhage, or an offensive discharge, being signals for immediate evacuation of the uterus.

NO CHOLERA OR YELLOW FEVER IN THE UNITED STATES.—The reported cases of cholera on the Mississippi River Steamer Annie P. Silver, and of yellow fever at New Orleans, have fortunately both turned out to be false alarms. The first report arose from the statement of a Dr. Pease, at Port Anderson, on the Mississippi River, who claimed that a child belonging to a family direct from Toulon had died on the steamer, and was buried at that place. Steps were immediately taken by Surgeon-General Hamilton to ascertain the facts, when it was definitely settled that the child died of summer complaint, and the family had never been to Toulon, but were from Mexico, and had been in New Orleans for some time before taking passage on the Silver. The yellow fever scare was occasioned by a suspicious death in New Orleans, which a post-mortem examination settled as not yellow fever.

SPECIAL ARTICLE.

THE RATIONAL TREATMENT OF GOUT, URIC ACID GRAVEL, AND ACUTE RHEUMATISM.

IT IS one of the encouraging facts in connection with the development of our science, that we are certainly acquiring a more accurate knowledge of those metabolic processes, without a correct understanding of which our treatment of the affections known as derangements of nutrition must remain empirical and uncertain. The latest contribution to such knowledge is a brochure by DR. P. W. LATHAM, Downing Professor of Medicine at Cambridge, Eng., "On the Formation of Uric Acid in Animals and its Relation to Gout and Gravel."

Rejecting, in common with most modern physiologists, the older view that uric acid is the result of imperfect oxidation of tissues, he ascribes its formation in the human subject partly to defective assimilation, and partly to a "condensation process," in much the same way that cyanuric acid and biuret are condensation products of urea.

In the human subject, glycocine united with cholic acid, is poured into the intestine as glycocholic acid, a constituent of bile. After the bile has served its purpose in digestion, the glycocine and taurine of the taurocholic acid, with the leucin and tyrosin arising from albumen-digestion, are converted by the liver-cells into urea, which is returned to the blood, and reappears in the urine.

The appearance of uric acid in the secretion of one animal, and of urea in another, is the result primarily of the non-conversion of glycocine into urea, whether that glycocine be derived from the bile poured into the duodenum or formed elsewhere in the body. That it is from the bile is probable from the fact that in the carnivora, whose urine contains little or no uric acid, the bile contains only taurocholic acid, and therefore no glycocine.

Now, as to the abnormal formation of uric acid in the human economy. Just as in diabetes the liver or some other part is unable to effect the metabolism of the glucose, which then passes into the circulation and is discharged by the kidneys, so in gout or gravel the imperfect conversion of glycocine is the primary and essential defect. It passes from the intestine or

elsewhere into the liver, through whose agency it is united with the urea resulting from the metabolism of leucin and tyrosin, and is converted into hydantoin, which passes into the blood and thence to the kidneys to be combined with another molecule of urea, forming ammonium urate, a portion of which overflows into the circulation and is converted into sodium urate.

Thus can be explained the effects of the sluggish liver in certain free eaters and drinkers. But as not every toper and gourmand develops gout, and every gouty person is not necessarily a toper or gourmand, Dr. Latham suggests that we look further, say to the nervous system—the medulla or spinal cord, or both—for some etiological change, which may be either hereditary or acquired. This may be primary in the nervous system, affecting the digestive apparatus through the vagus if in the medulla; or affecting the joints, through the spinal nerves if in the cord. Or it may be primary in the liver, and the accumulated uric acid in the blood affect the medulla and cord secondarily, and in turn produce nutritive changes, or inflammation in the joints connected with that part of the cord.

Important corollaries are deducible from these facts as to why gout does not generally appear until after middle life, and as to its association with chronic lead-poisoning, both of which furnish a kidney more or less crippled, which in its sound condition could have thrown off the uric acid. So, too, the phenomena of rheumatism may be similarly explained, supposing the lactic acid poison to result from a like defective metabolism, while the curative action of salicylic acid may be due to its combining with the antecedent of lactic acid, thus stopping its formation. This view is supported by the fact that mental or muscular fatigue, worry, or excitement will often induce an attack in those predisposed to gout, and a farther parallelism between gout and diabetes is thus established.

If, in consequence of simple imperfect assimilation, glycocine passes unaltered into the circulation, it may there be changed into carbonic anhydride and methymaline, which latter is instantly decomposed into ammonium, hydrogen, and oxalic acid. Thus may be developed the so-called oxalic diathesis, with all its accompanying nervous symptoms, not unlike those which are the precursors of gout, and which may be produced by errors of diet, and by the direct administration of oxalic acid. The effect of oxalic acid on the nervous system may be such as to intensify the force concerned in the production of urea, and so give rise to increased metabolism of the tissues and further formation of urea.

As to the application of these principles to the treatment of gout and uric acid gravel, moderate but not over exercise, tempered to suit the age, more for the young, less for the old, walking and riding are recommended; also a diet simple and nutritious, jellies and food containing gelatine being avoided, because the latter contains glycocine. Animal food, according to Dr. Latham, will not produce uric acid in a healthy system, as is shown by its absence from the urine of carnivora, but from all kinds of meat a certain amount of glycocine is produced, and even if the remaining nitrogenous part is converted into urea, the glycocine necessitates an increased elimination and consequently taxes more severely the powers of the kidneys. If these are weakened, the urea, and still more the uric ucid, accumulates in the blood. The simpler the diet, the less tax there will be upon the kidneys. It may be farinaceous, with just sufficient nitrogenous food to satisfy the wants of the system, and in acute attacks, let that be in the form of milk, diluted if necessary.

Dr. Latham refers to the striking benefit and increased urinary secretion which result in some forms of albuminuria from skim-milk, the simplest of all diets. A further explanation of the benefits of such a diet, and a further confirmation of Dr. Latham's views, are found in urinalysis. Dr. John Marshall, of the University of Pennsylvania, in a series of analyses of the urine of persons upon a pure skim-milk diet, found that in the total secretion for twenty-four hours of such persons no appreciable amount of uric acid could be found. A fuller statement of Dr. Marshall's results may be found in the paper of Dr. Tyson, on the "Milk Treatment of Disease," published in the *Journal of the American Med. Assoc.*, for June 7th.

The accumulation of glycocine being thus diminished, when present, it is to be eliminated by such gentle laxatives as promote the discharge of bile from the intestines after it has been secreted. Such a laxative is calomel, and also rhubarb, a few grains with double the quantity of magnesia daily. The salines, by causing serous discharges, may carry off some of the poison from the blood, and relieve a congested liver.

Again, remedies should be administered that will combine with glycocine, and thereby prevent the formation of uric acid. Such is benzoic acid, which seizes upon the glycocine and converts it into hippuric acid, rendering the uric acid already existing in the blood more soluble. It may be given, as originally prescribed by Golding-Bird, in conjunction with phosphate and carbonate of sodium in cinnamon-water. Or, if given alone, compressed into a five-grain pill, of which two may be given at a dose.

In like manner, salicylic acid combines with glycocine, forming salicyluric acid. Dr. Latham prefers this to benzoic acid where there is no albuminuria, since he claims that it not unfrequently increases that condition. He says, too, that the true acid made from the oil of wintergreen must be given, and not the artificial one made from carbolic acid, and as much as can be borne without producing head symptoms; in rheumatic fever, 20 grains every hour until the patient complains of slight buzzing, and then from 45 to 60 grains daily for a fortnight. It too should be compressed into a five-grain pill, or it may be given with phosphate of sodium, which is not only a solvent for it, but for uric acid as well. In our own experience, however, the enormous doses of salicylic acid recommended by Dr. Latham, are not borne by the American stomach.

The alkaline carbonates are also of service in gout, although sometimes they cause oxalates to take the place of uric acid, which state continues as long as the glycocine passes unchanged into the blood, so

that measures must be continued to promote the normal metabolism of that substance.

Iodide of potassium is also useful in chronic gout and in gouty asthma. It does not prevent, but rather encourages the formation of glycocine through hydriodic acid, but it exerts a solvent action on the uric acid in the blood: while it is also useful in removing thickening in the tissues about the joints. It may be given in doses of 10 to 15 grains two hours after a meal, and Dr. Latham combines it with small doses of tincture of belladonna.

Chloride of ammonium, very useful in some gouty cases, acts similarly to iodide of potassium through its hydrochloric acid. The bilious headache (megrim), often relieved by common salt, is probably gouty in origin, while many of the mineral waters which have a reputation for the cure of gout, contain, in addition to laxative elements, chlorides, which may add to the virtues of the waters.

The time-honored colchicum is acknowledged by Dr. Latham to be useful, especially in acute gout, but he has no rational explanation to offer of its action. May it not also aid in the elimination of glycocine?

REVIEWS.

EXCESSIVE VENERY, MASTURBATION, AND CONTINENCE. THE ETIOLOGY, PATHOLOGY, AND TREATMENT OF THE DISEASES RESULTING FROM VENEREAL EXCESSES, MASTURBATION, AND CONTINENCE. By JOSEPH W. HOWE, M.D., etc. 8vo., pp. xv. 299. New York: Bermingham & Company, 1884.

IF everything is to be judged by the company it keeps, this title-page puts what has generally been considered a virtue in danger of losing its credit. Equally we might say, and hope as sincerely to find ourselves mistaken, that the author of these three hundred and more pages runs no little risk from the possibility that the old saw alluded to may be applied to him; for the majority of the books written to treat of debased animal passion have been the work of men whose general reputations have not been good at any rate, or who have suffered in the esteem of their fellows by an apparent relish for what is, to many, simply disgusting.

There are some things in the book before us which make it more than usually unpleasant for us to say just what we think. But there have been of late so many publications of this kind put upon the market that it looks as if there might be some particular evil star in the ascendant, and it seems proper to say, plainly and severely, what our offended moral sense dictates, in order that there may be the less likelihood that forbearance shall be mistaken for approval.

The book before us, like all of its class, has not even the merit of presenting its repulsive subject correctly. It perverts the truth, avers what is notoriously false, and spices these faults with narratives which have nothing to commend them to one's attention but their depravity. To obtain these, the author seems to have searched to some purpose the pages of Lallemand and of his own recent predecessor in this unsavory field—Hammond. They and he alike deserve, in our opinion, the most unqualified condemnation, and we sincerely wish all may have no admirers or followers. We should think ill of our profession did we not believe that, as there were two sons of old Noah who, when he was not himself, went backward and covered him with a mantle, to one who looked unblushingly upon his nakedness and went off to talk about it: so the mass of medical men—who must be familiar with much which others may not so much as name—take no pleasure in contemplating nastiness, and turn their faces from it whenever they can.

SOCIETY PROCEEDINGS.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Stated Meeting, June 4, 1884.

THE PRESIDENT, J. M. DA COSTA, M.D., IN THE CHAIR.

DR. WHARTON SINKLER read the following paper on

A FORM OF NUMBNESS, CHIEFLY OF THE UPPER EXTREMITIES.

For several years, he said, I have observed in my service at the Infirmary for Nervous Diseases, in this city, and occasionally in my private practice, quite a large number of patients whose prominent symptom was numbness of the hands. The symptoms in these cases are quite regular and constant in their general characters. The patients are usually women, at about the change of life, although cases may occur in men, as will be seen from the instances given below.

The numbness generally begins in one or both hands and gradually extends up the arms. It may be felt in the feet and legs also. It is almost always most marked in the morning, before the patient rises. It is described as a "tingling," and "like pins and needles," or as if the limb "were asleep."

One patient, in whom the numbness was felt in both upper and lower extremities, said she felt like "a sleeping fool." Notwithstanding the numbness, there is but little loss of feeling to touch or pain, and usually the compass points are distinguished as readily in the affected part as in other portions of the body.

The numb member is weak, but there is no paralysis, and the weakness is transient. Often there is pain associated with the numbness. The patients sometimes think the hands are swollen at the time when the numbness is most marked.

I will give, briefly, the history of some typical cases of the affection. It must be borne in mind that I do not consider all cases of numbness as coming under this head. There are many cases of numbness met with which do not depend upon organic lesions of the nervous centres, and yet differ from those which I am now considering.

Case I.—Hannah R., æt. 30 years, single, coat-maker, applied at the Infirmary for Nervous Diseases February 6, 1872. Complains of numbness and pain in both hands and arms. They began three weeks ago in the hands, and the attacks now extend above the elbows. They are induced by sewing, and also come on at night. The numbness and pain begin in the ulnar distribution of the right hand and then extend to the rest of the hand and up the arm. In the left hand they are confined to

the forefinger. Sensation is accurate in the affected regions. The ulnar distribution is affected readily by slight pressure over the course of the nerve. There is some tenderness over the median nerve. There is no spinal tenderness. The pulse is feeble, and there is a slight murmur heard at the base of the heart. There is some rheumatic stiffness of both wrists, and decided difficulty in moving the right shoulder. Under the use of galvanism and a very strongly stimulating liniment to the arms, the patient was entirely relieved of the numbness and pain.

Case II.—Letitia M., æt. 48 years, applied at the Infirmary for Nervous Diseases July 5, 1878. Has always been a healthy woman, and has no history of rheumatism. About one year ago she noticed numbness in the right hand: at first in the thumb and first and second fingers, and occasionally in the other fingers. In the beginning it was felt only in rising in the morning, but latterly it has remained all day in the first and second fingers. It is always worse in the morning. About two months ago, she noticed pain at the base of the thumb like a sprain. It comes on with any movements of the arm, and ceases when the limb is at rest. Any movements which require pressure with the thumb bring on pain. There is slight pain on pressure over the median nerve. Sensation to touch and the compass points in the hand and arm are normal.

Case III.—Catharine O'C., æt. 50, washerwoman, applied at the Infirmary for Nervous Diseases June 22, 1880. Catamenia have ceased for some time. Six months ago began to have numbness in the left hip, which extended down the leg. Has had an attack in the right hand. It is worse in the mornings. Dynamometer, right 90, left 70. Ordered ext. ergot. fld. gtt. xx t. d. *July 14.* Returned, saying that she was much better.

Case IV.—Mary M., æt. 60 years, applied at the Infirmary for Nervous Diseases September 15, 1880. Two years ago she was cutting grass with scissors when she injured the forefinger of the left hand. This was followed by numbness of all the fingers, which extended up the arm. The numbness and tingling are now in both arms, and are also felt in the legs. They are most marked at night when the patient is in bed, especially if she lies upon her back. The sensibility of the fingers is good, but there is a slight loss to compass points. The numbness is most marked in the second and third fingers. The hands feel weak. Dynamometer, right 80, left 85. Ordered ext. ergot. fld. ℥ss t. d. *October 13.* Much better. Dynamometer, right 100, left 100. Decreased ergot to gtt. xx t. d. *26th.* Not so well. Increased dose of ergot to gtt. xl t. d., and applied mustard plasters over spine every night. *December 8.* Dynamometer, right 115, left 100. Numbness very much less. The patient continued to improve, and when last seen, in May, 1882, stated that she was greatly relieved of the numbness, although it still occurred at times. If she allowed the arms to lie close by the side when asleep, they became numb. If they were extended, this did not take place.

Case V.—Mrs. B., æt. 50, nurse, applied at the Infirmary for Nervous Diseases November 25, 1881. Menopause eighteen months ago. Is in good health with the exception of numbness of the hands, which began several years ago. There is no assignable cause for the numbness. The numbness is always in the ulnar distribution, and occasionally in the median distribution of hand, and extends up the arm. It is decidedly most marked in the left hand and arm, and is occasionally felt in the left foot. The position of the arms had no influence in bringing on an attack of numbness, but prolonged exertion of the arm will induce it. There is always loss of power of the arm after the numbness has passed off. The dynamometer shows a difference of 20° in favor of the right hand. The patellar reflexes are good. Heart normal.

Case VI.—Mrs. J. æt. 51, appplied at the Infirmary for Nervous Diseases February 15, 1884. Two years ago used her right hand very much. Then began to have numbness in the fingers and hand. Following this there was a burning pain. Her general health has been good, but she sleeps badly. The numbness begins in the fingers, and it is followed by a burning pain which also begins in the fingers, and extends up the arm as far as the elbow. It is most frequent in the early morning. There is slight tenderness on pressure of the ulnar nerve at the elbow. No loss of sensation to touch or to compass points. Dynamometer, right 80, left 95. Ordered ext. ergot. fld. gtt. xx t. d. *February 25.* Returned, saying that the pain and numbness are much relieved. Continued same treatment. *March 10.* For the past few days symptoms have been worse. Is sleeping badly. Ordered to stop ergot and take sodii bromid. grs. xv t. d. *April 17.* Reports that she was not so well while taking bromide. Returned to ergot of her own accord yesterday, and slept well last night. The numbness is also much less.

Case VII.—Mrs. M., æt. 50, widow, consulted me July 13, 1881. Has enjoyed good health and worked hard until recently. Catamenia regular until three years ago. Then she began to have numbness and pricking of the feet, with starting of the legs while in bed. The numbness then extended to the hands and arms. Numbness is now worse in left arm, but a month ago the right arm was most affected. The wrists are painful, and feel as if sprained. If the arms hang down, the numbness is increased. The hands and legs become swollen. She has frequent "flushes of heat" through the whole body, and she then becomes flushed and warm, the sweat starting out freely. Her sleep is interrupted by the starting of the legs. She is a stout, florid woman; has a good appetite, and no dyspepsia or constipation of the bowels. The urine was found to be free from albumen. She is very nervous and often has headaches. The symptoms were markedly relieved by bromide of sodium and ergot.

Case VIII.—Charles E. S., æt. 34, carpenter, applied at the Infirmary for Nervous Diseases August 30, 1878. For a year he has had a sense of general fatigue, and for several months he has had pain in the right shoulder. He has worked very hard, both mentally and physically, for some years. Since last fall he has felt very sleepy all the time. A few days ago noticed twitching of the right hand, and at night was awakened by pain and numbness in the palm of the hand and twitching of the fingers. Since that time the numbness and pain have continued, but are worse when he lies down, so that he is prevented from sleeping. He has had pain in the cervical region of the spine. The patient is obliged to use the right hand a good deal, as, for in-

stance, in planing, and this brings on the attack of pain and numbness. On examination, no twitching is seen, but the patient says there is a feeling as if the fingers were twitching. There is no loss of sensation in the right hand to touch or compass points. The right hand has become weaker. Dynamometer, right 130, left 130. Appetite poor; tongue furred; tendency to diarrhœa. The urine is free from albumen. Ordered potassii iod. gr. x, vin. ergot. f℥j t. d. *September 6.* Is better. Can sleep now, but is awakened about 5 A.M. by pain and numbness in the right arm and shoulder. *11th.* Improving, but the early morning pain and numbness continue. Increased wine of ergot to f℥iij t. d. *18th.* Now sleeps very well. No early morning pain and numbness. This patient remained under treatment at intervals until September, 1881. He had occasional relapses; the attacks being almost invariably brought on by overuse of the hand. At times the numbness extended to the right leg. The pain in the back of the neck was sometimes felt. The last note of the dynamometer was right 155, left 150. The treatment consisted in the free administration of ergot, and, after the subsidence of the symptoms, phosphorus, strychnia, and iron were given for long periods. Blisters were applied over the cervical spine several times.

Case IX.—Mr. H. P. M., æt. 30, married. This patient had an attack of poliomyelitis anterior in 1877. I related his case at length in THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES for October, 1878. He made a complete recovery from the paralysis, and enjoyed excellent health until March, 1883. At this time he came to me complaining of numbness in the hands. The attacks came on in the early morning, and would waken him from sleep. At first he ascribed it to sleeping with his arm extended above his head, but it continues to occur no matter in what position the arms are. The patient is in good general health. No indigestion or rheumatism. The sensation in the hands is normal; the grip is weaker than before the numbness began. Dynamometer, right 156, left 120. He complains of an area of coldness in the right thigh above the knee. There is no anæsthesia or numbness in this region. This case was treated at first with iodide of potassium and massage, and later with strychnia. The symptoms were gradually relieved, and the strength of the hands returned. On April 7, 1883, dynamometer marked right 160, left 130. He still had occasional returns of numbness until October, 1883. At this time, however, the numbness was confined to the tips of the fingers, and did not disturb him until late in the morning.

Mr. M. consulted me again on March 17, 1884; he stated that he had remained free from numbness until lately. The attacks came on as before, *i. e.*, in the early morning, waking him at about 5 A.M. The numbness is worse in the right hand, and this hand is relatively weaker than the left. Dynamometer, right 142, left 136. The hands feel as if they were swollen in the early morning. Ordered ext. ergot. fld. gtt. xxx t. d. *April 4.* Patient reports improvement. Numbness comes on later in the morning. Now ordered strychniæ sulph. gr. $\frac{1}{60}$ t. d. Ergot stopped. *26th.* Better; sleeps until 6 A.M., but is then wakened by the numbness. Stopped strychnia. ℞. Syr. d'ergotinine (Tanret's) f℥j t. d. *May 6.* Patient thinks last prescription has had more decided influence in relieving the numbness than anything he has taken; the numbness comes on later every day. Dynamometer, right 158, left 142. *18th.* Patient now has no numbness.

It will be seen that of the female patients whose cases I have given, their ages were between forty-eight and sixty years, with the exception of one who was thirty years. In this case the disorder was induced by the nature of her work, which was constant and hard sewing. The ages ranged as follows:

1 aged 30 years.	1 aged 51 years.
2 " 48 "	1 " 60 "
3 " 50 "	

In two patients, Cases I. and VII., there were evidences of rheumatism, but in none of the others were there any symptoms of rheumatic trouble. In Cases I., IV., and VIII., the origin of the trouble seemed to be in overuse of the limb first affected. Indeed, in Case VIII. the affection at first seemed like a low form of an ascending neuritis, but afterwards the symptoms were more general.

Most of the patients were in good general health, but some were anæmic or overworked.

The numbness in most instances was in both arms, occasionally it was found in all of the limbs, and in three cases in one arm alone. The ulnar and median distributions were most frequently affected.

Pain was associated with the numbness in several patients. It was not an acute pain like neuralgia, but, as one patient expressed it, like the pain which comes when a limb is getting over being asleep. Tenderness over the ulnar or median nerve was observed several times. There was usually some loss of power in the parts involved. The dynamometer showed several degrees difference between the hands in the cases when only one limb was affected. The duration of the affection was from a few months to several years. One of the patients had suffered from the disorder for two years before coming under observation, and at the end of a year and a half still had occasional attacks.

Dr. Weir Mitchell, in a lecture on "The Symptom Numbness,"[1] and later, in a chapter in his work on *Diseases of the Nervous System*, has described several varieties of numbness. Most of his cases were in anæmic or hysterical persons, and the symptom yielded under a course of treatment which tended to improve the nutrition and *morale* of the patients. He refers to cases in which the numbness came on during sleep, and remarks that this is a form "which belongs to the night." He finds that the numbness in the cases he has seen is frequently hemiplegic in character, and alludes to the fact that "some persons who have gotten pretty well of a hemiplegia of organic cause are liable to waken out of sleep with numbness and lessened power of the side once palsied.

Dr. James J. Putnam, in a paper read before the American Neurological Association,[2] treats at length of a series of cases of "paræsthesia mainly of the hands." He bases his paper upon the notes of thirty-one cases, and the description he gives resembles those which I have related. He finds that most of his patients were women, and almost all were in middle life, but he does

[1] Med. and Surg. Reporter, Dec. 2, 1876.

[2] Archives of Medicine, vol. iv., No. 2, Oct. 1880.

not remark upon the fact that they were about the period of the menopause.

Dr. Putnam suggests that the possible cause of the affection is, "alterations of the blood-supply of the smaller branches or terminal filaments of the sensitive nerves supplying the affected districts."

The treatment of this writer consisted in the use of galvanism, phosphorus, strychnia, bromide of potassium, and several other drugs. He did not think that he had had sufficient opportunity to test the value of the different remedies, but seems to have found phosphorus of more value than any other one means used.[1]

Dr. J. A. Ormerod has described twelve cases[2] which very closely correspond to those which have come under my observation. All of his patients were women, and the attacks of numbness began to come on about the cessation of the menses. Three of his cases were rheumatic, and in some the trouble proceeded from the nature of their work. Bromide of potassium afforded marked relief in many of the cases. Dr. Ormerod compares this affection to the deadness of the fingers which some persons experience after exposure to cold, and therefore ascribes it to vascular spasm.

It has seemed to me that in these cases there is probably a condition of hyperæmia either of the nerve-trunk or of a portion of the cord. In some cases I think the hyperæmia is confined to the nerve-trunks or to some of the terminal filaments of the sensory nerves, but in others it seems not unlikely that the cervical enlargement of the cord becomes hyperæmic or congested, from the fact that the numbness is often bilateral. The circumstance that the affection comes on at night seems to me to strengthen the view of the pathological condition being one of hyperæmia, for the supine position favors an increase of blood in the cord and the nerves of the extremities. I have seen patients in whom the numbness would come on if they lay down and fell asleep even for a short time in the day.

Women at the change of life are more prone to hyperæmias and congestions than at other periods of life, and they are the most frequent subjects of this form of numbness.

In several of my cases ergot gave marked relief, and Dr. Ormerod found bromide of potassium the most successful therapeutic means he used. Both of these remedies are believed to diminish the blood-supply in the nervous centres. It is true that Dr. Putnam found phosphorus the most useful drug in his cases, but in one of those which he reports the remedy failed, and another was relieved by bromide of potassium.

From my experience in these cases, I should say that the prognosis in middle-aged women was not good for permanent relief. The numbness can generally be greatly benefited or stopped for the time, but it is liable to return. In those cases in which the trouble has been induced by overwork of the part, one can almost surely promise permanent cure if the cause can be removed.

With regard to treatment, as indicated above, ergot has proved the most useful medicinal means I have employed. Massage and spinal galvanism are always useful adjuvants, and so are all means which improve the general health. Bromide of potassium has helped some of my cases, and one patient was much benefited by sinapisms over the spine. It was found advantageous in most of the patients to give strychnia for a time after the disappearance of the numbness.

[1] In a note recently received from Dr. Putnam, he says that he has lately found lead in the urine of one of the patients referred to in his paper, and thinks that it should be looked for in all cases of numbness.

[2] Saint Bartholomew's Hospital Reports, 1883.

CORRESPONDENCE.

ETHERIZATION BY THE RECTUM.

To the Editor of THE MEDICAL NEWS.

SIR: From the first publication in regard to the production of anæsthesia by introducing the vapor of ether into the rectum, I was satisfied that it was not a new process, but dated far back of Yvrsen, of Copenhagen, or Mollière, of Lyons. It was associated in my mind with the name of Pirogoff, but I searched my notes and references in vain. Having now stumbled upon the evidence of an earlier use of this method than the present time, I send it for the benefit of your readers, and with it all the references to the original papers, that those interested, and having access to large libraries, may study the subject.

The method is mentioned in Bernard's *Leçons sur les Anesthètiques et sur l'Asphyxie*, Paris, 1875, p. 61. After stating and illustrating the proposition that all anæsthetics must gain access to the blood to produce their effect, the author says:

"In the same manner it is possible to produce anæsthesia by introducing the vapor of ether freely into the rectum, but it is a practice little followed, very uncertain, and which is recalled only as an historical curiosity. The possibility of anæsthesia by the rectum having been indicated by Roux (*Acad. des Sciences*, 1er Fevrier, 1847), it has been since established as to animals, by Vincente y Hedo (*Ibid.*, 17 mai, 1867), and by Marc Dupuy (*Ibid.*, 5 avril, 1867). It is M. Pigoroff, however, of St. Petersburg, who has tested this proceeding on patients (*Recherches pratiques et physiologiques sur l'Etherization*, St. Petersburg, 1847). According to Pirogoff, anæsthesia comes on rapidly, without preceding excitement; scarcely has the vapor of ether penetrated the rectum, or at the end of one or two minutes, when it can be detected in the breath. A short time after the etherization, a large quantity of gas mixed with the vapor of ether escapes from the rectum. . . . Meantime, this method has not been adopted; the attempt was only inspired by the exaggerated fears of inhalation of anæsthetic vapors which prevailed at that time."

If some one of your readers would translate and publish Pirogoff's paper to which reference is made above, he would confer a favor upon the profession, or at least furnish a very interesting article for perusal at this time.

Yours, J. C. R.

DAYTON, OHIO.

THE DANGER OF GLASS VAGINAL DILATORS.

To the Editor of THE MEDICAL NEWS.

SIR: May I add a recent experience of mine to that of Dr. R. Tauszky as a protest against the use of glass in the vagina? I was summoned hastily about mid-

night to a patient of a prominent gynecologist, who happened to be out of the city, and found that the lady had been using glass dilators, under his supervision, to maintain the results of an operation for vaginismus with rigid hymen. Whilst she was lying quietly in bed the glass broke in her vagina with an audible report, although it had been in her some minutes and had not been dropped or exposed to any violence. It had been used *secundum artem*. Much difficulty was encountered in extracting the end, which had separated as a disk with upper edges rounded and the lower sharp, but by the use of the handle of a large spoon in the manner of a Sims's speculum and putting a finger in the rectum, we succeeded without causing serious laceration. I have once or twice seen a tumbler quietly standing on a table unaccountably fly to pieces without apparent external agency, and suppose the breaking of the dilator was of parallel origin, although I know of no way of explaining the phenomenon.

Yours, etc. . . . .

NEWS ITEMS.

CHICAGO.

(*From our Special Correspondent.*)

THE LOCAL CONFERENCE OF HEALTH COMMISSIONER DE WOLF AND CHICAGO PHYSICIANS ON THE CHOLERA SITUATION.—Commissioner De Wolf opened the meeting, in the City Hall, Friday, July 25, by thanking the physicians for responding to his invitation. He did not design nor attempt to shift or transfer any responsibility which the duty of his office imposed upon him to other shoulders. But he well understood that, when a community was disturbed—as all communities were at this moment—it was very important that mistakes should not be made. He also understood that any act which they approved, or any measure which they suggested, would be precisely the right thing at the right time, and would meet with the approval of the community.

Is the city of Chicago, to-day, in a satisfactory condition from a sanitary standpoint? There was only one answer. It was not, and never would be in his day or theirs. There were large tracts of territory in this city which must fill any intelligent mind with alarm in the face of an epidemic. For example, the Fifth Ward, with 57,000 people, and the Fourteenth Ward with 67,000 people, were in a shocking condition. In the Fourteenth Ward, 30,000 people lived on unsewered land, from three to five feet below the surface of the street, the privy vaults and house sites were saturated with water eight months in the year, the ground receiving the sewage from the dwellings and the seepage from the vaults; cottages of four rooms, having a family in each room, with many children—packed like herrings in a box. Such conditions were far from sanitary conditions.

When, on June 23, 1883, cholera appeared at Damietta, he felt reasonably assured that this atrocious disease had commenced its journey over the civilized world, and from that day he had in every way done what he could to prepare for its advent. Last year, thirteen miles of sewers were put down; this year, nine miles, so far, and seven more were to be laid. Last year the tenement force was increased, and he commenced a thorough and complete examination of the tenement houses of the city. Of these, 4644, containing 125,000 people, had been examined and their sanitary condition improved; 3973 privy-vaults had been cleaned; the department had in operation 144 two-horse teams cleaning the alleys, and the Department of Public Works gave employment to 151 men and 25 teams, with two men to each team in cleaning gutters. This work was independent of the ordinary street-cleaning, which was done by contract. This work was pursued under difficulties; in some sections of the Fifth Ward, the gutters were below the surface of the sewers. There were miles of sewers so placed that neither house-sinks nor gutters could be connected with them until extensive areas of country were raised to the sewer-level. It was necessary to place these sewers at the level that they might be connected with the general sewerage system.

Individual opinion was asked upon the following subjects:

I. Quarantine. While a firm believer in it, he had absolutely no confidence in the ordinary operation of quarantine. For example, Toulon placed what is called a military cordon sanitaire about the city, and yet through that line of soldiers and police, forty thousand of the lazzaroni, each with a bundle of rags, dispersed themselves over Europe. In 1873 quarantine was observed in New York and Boston—a quarantine of the individual—but that individual had with him a trunk or a box infected with cholera germs from the cholera districts, and cholera appeared in De Peyster Street, New Orleans, and at three or four points in the Northwest from the exposure of this clothing. The quarantine which observed the individual and not the condition of his clothing, was a delusion and a fraud. If cholera appeared on our coast, he should regard it his duty to place a medical inspector —an accomplished man—on every immigrant train coming into the city, to find out where the immigrant proposed to stop. If in Chicago, the baggage should be taken possession of and fumigated. If they were merely passing through the city, no attention should be paid to it. It was possible that at the conference to be held at Washington, August 7th, some action might be taken which would relieve the city authorities from these observations. The placing of these young medical men meant a large expenditure of money. While there was no limit to the amount he could receive for the management of an epidemic, if it appeared, the money must be spent intelligently as well as vigorously, and if they approved this disposition to which he had referred, it would be so spent.

II. Hospital accommodation. There was the small-pox hospital, four miles from the city, which was in admirable order, and under the care of an order of the Catholic sisterhood. Should that hospital be utilized for cholera purposes if the disease appeared? Would the private hospitals be ready and willing to open their doors, and set aside space where we might put cholera patients unable to take care of themselves? If not, would they advise the erection of temporary hospitals in different parts of the city?

III. Division of the city into districts, and the appointment of medical officers. He had divided the city in his mind into forty districts, into each of which, when cholera appeared on the coast, he proposed to put a young, intelligent medical man. He had most of them in mind, and would complete the list before the end of

the week. He proposed to call them together and confer with them touching their duty as health officers in relation to an epidemic of this kind. He would be in constant communication with them by telephone. At the City Hall there would be on duty at all times an ample ambulance service. When there was occasion for it, this could be put in operation at twelve hours' notice.

IV. Resources for disinfection. The resources for disinfection were ample and complete. He could command five thousand gallons of chloride of zinc every day, if necessary. This chloride of zinc was a waste product in connection with certain manufacturing interests in Chicago, and would cost the city nothing.

As to the condition of the city to-day, he claimed that the inspection of tenement houses, the putting in of sewers, and making connection, and cleaning of privies was a legitimate sanitary work. It did not appear on the surface, but it told when the mortality list of the city was reviewed. The death-rate in Chicago had been steadily diminished from 26 in 1000 to less than that of any city of its size on the globe. He claimed that Chicago was in relatively good shape to meet the shock of any epidemic. In reply to questions, Dr. De Wolf said that the smallpox hospital could accommodate two hundred patients, but that the distance was great and the roads were bad.

DR. N. S. Davis approved the suggestions relative to the quarantine, but thought they would be ineffective. He suggested that when a train was inspected, the results should be telegraphed ahead, in the direction it was going, so that the people of other cities might also derive a benefit from the inspection. As regards hospital accommodations, he desired to encourage the treatment of patients wherever they happened to be seized, as removal was likely to hasten death. He thought there was no ground for expectation of cholera this year. It was not America's turn. It did not come here, as a rule, until the third year after it appeared in the distant East.

DR. W. H. BYFORD thought all quarantine was an experiment, and of doubtful utility; he approved the plans of the Health Commissioner. As to hospitals, he favored the erection of temporary ones of boards. Tents would be better.

DR. H. A. JOHNSON thought that the measures of quarantine to be established here should depend upon those taken elsewhere. He thought it bad policy to wait until it had got to Hyde Park in trains coming to the city. In a city, in the midst of a continent, besieged by an enemy whose approach must be guarded from every quarter, it will be found difficult to do anything. He approved the idea of temporary barracks in place of regular hospitals.

DR. EPHRAIM INGALS, took a sanguine view of the situation, and thought Chicago had no more reason to fear a cholera epidemic, than she had to have apprehension of a second fire.

Drs. R. N. Isham, R. Ludlam, J. B. Ross, Ernst Schmidt, J. H. Etheridge, J. E. Gilman, and Wickersham, expressed approval of the Health Commissioner's plans.

The following resolution was then offered, and adopted:

Resolved, That we have been informed of the plans and means which the Commissioner of Health proposes to adopt in case an outbreak of cholera should occur in our city, and we approve of the same.

The very pertinent question—"Why is the water of the North Branch pumped into the lake?"—was referred by the Commissioner of Health to the Commissioner of Public Works, who was not present.

CHOLERA NOTES.—The cholera mortality at Marseilles and Toulon is diminishing, but the disease has spread to Arles, Mouillon, La Valette, and Aix, and isolated cases continue to be reported in various parts of France, some widely distant from the infected district. At Vintimiglia, in Italy, ten deaths have been reported, at Panealieri seventeen cases, and at Spizzia two deaths.

At Marseilles, the daily mortality has diminished from 43 on the 23d ult. to 23 on the 29th.

The classification of the deaths from cholera, according to the nationality of the victims, gives the following results: French, 798; Italian, 322; Spanish, 13; Greek, 9; English, 1; Austrian, 1; German, 1, and American, 1.

The disease is reported not to have the same virulence that has characterized previous outbreaks, and that it appears to have attacked sickly individuals rather than whole sections of the population. It is estimated that the total number of deaths at Marseilles since the outbreak appeared reaches 1000, and that 500 cases have been cured. At Toulon, the total mortality to July 26 is 593.

The French Academy of Medicine proposes to hold an international congress to discuss the prevention and cure of cholera. Dr. Koch has asked that the congress meet in Berlin.

BRITISH PRECAUTIONS.—The Duke of Cambridge, the Commander-in-Chief of the British Army, has issued additional orders for the taking of precautionary measures against cholera in the army. He has directed the barracks throughout England to be placed in the best sanitary condition possible. He has also given orders for the creation of a system of medical relief and for the removal of the troops into camps in case the cholera appears among the soldiers.

The steamship St. Dunstan, which arrived from Marseilles on July 18th, having two cases of cholera on board, left quarantine at Liverpool on July 23d and was docked. She had been previously thoroughly fumigated to destroy all possibility of infection.

CHOLERA PRECAUTIONS IN FRANCE.—The Comité Consultif d'Hygiène Publique of France, have promulgated the following rules for protection against cholera:

Excessive fatigue, either by travelling or for pleasure, as well as by prolonged wakefulness and cold baths of long duration, should be avoided. Chilling of the body, especially during sleep, drinking large quantities of cold water, are very dangerous in time of cholera. The use of bad water is one of the most frequent causes of cholera. When not perfectly sure of the good quality of the water used for drinking and cooking purposes, it is better to boil a supply for each day, as boiling makes it perfectly safe. A small quantity of tea, hops, or bitter or aromatic plants, or wine, may be added to the water to be boiled. The following drink is recommended as excellent for quenching the thirst

without drinking a large quantity of fluid: Rum, 40 parts; alcoholic tincture of gentian, 4 parts; fresh water, 1000 parts, by weight. It is better to filter this through charcoal. Table mineral waters are excellent.

Bakers should be forbidden to make bread with water from wells placed inside of a house, when latrines and manure heaps are sufficiently near to soil the water, and they should be absolutely forbidden to use such wells in time of cholera.

There is no reason why fruits should not be used in moderation, provided they be of good quality. They should always be peeled, and it is better to eat them cooked. This applies also to vegetables, which should be cooked. Every indiscretion of diet should be avoided. It is very dangerous to drink much alcoholic liquor; complete abstinence is better than a slight excess. Ices and iced drinks taken rapidly during digestion, or while the body is perspiring, are liable to cause choleraic attacks, and should be avoided.

Precautions in case of an attack. The least digestive troubles may invite an attack of cholera, consequently they should never be neglected, and a physician should be sent for immediately, as an attack may be prevented or arrested by timely active treatment.

Nurses for cholera patients. No person in attendance upon a cholera patient should go without rest for more than twelve hours. They should have a double quantity of wine, and of coffee at night. Every day, after the morning visit, the physician should see to the state of health of these persons, and prescribe, when necessary, rest and suspension of duty.

Transmission of cholera. Cholera is most frequently propagated by vomited matter and alvine evacuations; and these discharges are very little less dangerous in mild cases than in the most severe. They should be disinfected, and removed from the sick-room as soon as possible.

Disinfection. Every latrine in a house may be poisoned, when emptying into one discharges which have not been disinfected. The disinfectants to be recommended are first, sulphate of copper, next, chloride of lime, and chloride of zinc. Carbolic acid and copperas are insufficient. To each alvine evacuation or each quart of liquid matter, a large glassful of the following solution should be added: Sulphate of copper, of commerce, ʒxiij; water, Qj; or a small coffeecupful of chloride of lime in powder (about ʒxx); or a solution of chloride of zinc (1 to 100). It is best to place these in the bottom of the vessel intended to secure the dejections.

Linen. Soiled body- or bed-linen should be plunged, before being taken out of the room, into a tub containing either a gallon of the sulphate of copper solution, or two cupfuls of dry chloride of lime. They should be put into the tub, and wrung out—about half an hour in the copper solution is sufficient. This solution should be made fresh every day. When removed from the solution the linen should be immediately boiled, before using soap. Disinfection may also be performed with sulphur in the following manner: The clothes are hung up in an empty closet, all the openings of which are thoroughly closed, and a little water is sprinkled on the floor to make the air moist; ʒvij of flowers of sulphur to the cubic yard are then burned. The sulphur should be placed in a vessel placed at the bottom of a small basin half full of moist sand. The sulphur is lighted and the person leaves the room immediately, to return and open the closet in about twenty-four hours. When the clothes are very much soiled, they should be burned.

The floors. The soiled spots on the floors and drapery about the room should be immediately washed with a rag dipped in the copper solution, or in milk of chloride of lime, made by mixing a spoonful of the dry lime with a quart of water. The rag should then be burned.

The beds. So far as possible, the beds occupied by cholera patients should be protected by paper to prevent soiling of the mattresses. The paper should be burned afterwards. Mattresses touched or soiled should be moistened by means of a rag or a piece of wadding or tow, with the copper solution (1 part in 5 of water) or with the chloride of lime solution (a spoonful of dry lime to a quart of water). They should afterwards be removed, in special vehicles, and disinfected in an oven, either by steam or heat, 220° F. If this cannot be done, they should be placed on stands in a close room and disinfected by burning sulphur, not less than ʒvij of flowers of sulphur to the cubic yard of space in the room.

Water-closets. Twice a day, in houses in which there is cholera, two quarts of the copper solution should be emptied into the basins, or two cupfuls of lime in two quarts of water. A cupful of the copper solution or of solution of chloride of zinc should be emptied every evening into the drain-pipes about the house. Wherever it is possible, siphons or U-tubes should be attached, so as to prevent the entrance of gas into the house.

Provisions and everything to be eaten should be kept in tight cases, and every day half a glass of the copper solution should be poured over their surface, or one or two spoonfuls of chloride of lime, in powder. The kitchen refuse should be placed every day in a close metallic case, and sprinkled with chloride of lime before night. Every morning this case should be emptied by the city carts, a quantity of chloride of lime being placed at the bottom of the case when it is emptied.

The following are the general rules for public hygiene:

Public assemblages. In time of cholera there should be no assemblages of people, as in this manner the disease may be easily propagated.

Accumulations of filth. The accumulation of dirt and filth of any kind in the neighborhood of houses, should be strictly prohibited. They should only be disturbed and removed after having been disinfected with one of the materials mentioned above. Nor should any stagnation in sewers or drains be allowed; they should be disinfected and flushed. Scavenging should only be done with hermetically sealed receptacles, working by steam, and burning the gas under heaters. After each operation the place should be disinfected. All drains should be supervised and disinfected by the public authorities.

Compulsory notification. The immediate notification to the authorities of every case of cholera, should be obligatory.

Transportation of cholera patients. When a case occurs in a hotel or lodging-house, the authorities should be at once notified. The patient should not remain in the house, even for twenty-four hours, but should be carried to a specially provided place.

Disinfection of rooms. A room which has contained a cholera patient, even for the shortest time, should be disinfected with sulphur.

Disinfection of infected apartments. The room occupied temporarily by a cholera patient should not be occupied again until it has been completely disinfected by burning ʒvij of sulphur to the cubic yard.

Special ambulances. When several persons occupy the same room and one becomes infected with cholera, he should be immediately taken away in a hospital or special ambulance, to some place where the chances of recovery are greater and of infecting the others are removed.

Inspection of houses. In every house in which a case of cholera occurs, an immediate inspection should be made by a municipal officer, first to ascertain the true nature of the attack, and then to take active measures for disinfection. If it has not been thoroughly disinfected, it should be disinfected anew, the lodgers being compelled to vacate for twenty-four hours.

Laundries. Public laundries should be under the strictest supervision, and particular care be taken that the clothes of cholera patients are not washed together. As stated before, these should be thoroughly disinfected before being washed.

Distribution of disinfecting materials. Each police station should be a depot for the storing of disinfecting materials, put up in bottles or packages, of flowers of sulphur, dry chloride of lime, pulverized sulphate of copper, and solution of chloride of zinc, 45 per cent., with labels clearly stating how they should be used. These should be gratuitously distributed to persons having an order from a physician or a municipal officer.

Carriages. A sufficient number of carriages should be set apart for the sole purpose of conveying cholera patients. They should be disinfected every day. Special ambulances and urgency rooms for the temporary use of cholera patients should be furnished by the authorities.—*Gazette Méd. de Paris*, July 12, 1884.

PRECAUTIONS ELSEWHERE ON THE CONTINENT.—It is stated that the running of through coaches on the railways between Germany and France will be stopped on account of the cholera.

The Swiss Federal Council has decided not to stop the annual military training on account of the cholera.

A cablegram from Athens states that the steamer "Tiger," belonging to the Messageries Maritimes, from Marseilles, arrived off the Piræus, on July 27, with two cases of cholera on board. Admittance to the port was refused, and the steamer departed for Smyrna.

The *Wiener medizinische Presse*, of July 13, in an editorial article, questions if the meeting of the International Medical Congress should not be put off on account of the danger of propagating the cholera.

PRECAUTIONS IN THE UNITED STATES.—At the annual meeting of the West Virginia State Board of Health held on the 22d ult., the Secretary, Dr. James E. Reeves, was instructed to adopt such means as might seem to him best to protect the State from cholera.

Health Commissioner Stevenson, of St. Louis, will ask the Municipal Assembly, which meets on August 1st, for an appropriation to close all the wells in the city as a sanitary measure. Other measures will also be taken to place the city in a thoroughly clean condition to meet any possible appearance of cholera this season. A number of special inspectors are now giving private premises a thorough examination, and the entire police force has been put under strict orders to enforce all laws regarding nuisances.

An application was recently received at the Treasury Department for the admission at the port of New York of a consignment of rags, which had been shipped at Marseilles in May last. The vessel showed a clean bill of health, and had passed quarantine at New York. The application was denied on the ground that the order prohibiting the entry of rags from infected ports was imperative, and allowed no discretion.

PASTEUR'S CRITICISM OF KOCH'S VIEWS ON CHOLERA.—*Le Figaro* has interviewed Pasteur regarding Koch's views of the cholera in France, and he replied, in writting, as follows: All the prophylactic measures against cholera which the press has reported as having been indicated by Dr. Koch at Marseilles and Toulon, are precisely those which have been recommended since the time when it was shown that cholera was principally transmitted by the dejecta of the cholera patients.

There is, however, one very new point in the instructions of Dr. Koch. He condemns irrigation and drainage by water in the gutters, and states that all causes of humidity are favorable to the propagation of the epidemic. We cannot view this proposition in the same light. If there are cholera microbes in the streets, or in a room, or on dry soiled linen, and these microbes have become so dry as to be non-viable, certainly sprinkling them will not render them viable. If, on the contrary, their state of desiccation is such that humidity favors their return to life, they should be moistened, as they will thus be rendered less susceptible of being carried about by the wind. In fact, if they are left in this state of relative dryness, and are not dead, the least movement will convey them to our mucous membranes, where they will find the moisture necessary for their life.

This logic appears to him incontestable, and proves how ill-founded is the opinion of Dr. Koch. Who will dare to enter, he asks, to sleep and eat in a room in which a cholera patient has died, and in which the linen and other clothing has been left dry for several days? "The objects soiled by the dejecta should be cleaned with dry linen, which should then be burned," says the report. This appears impracticable to me. A vase or marble is only with great difficulty cleaned with a dry rag; but it is not possible to clean cloth in this way. "Burn it," adds the report. My advice is different. It is well known that in burning linen small particles become detached and float about the room before being thoroughly burned. I prefer to plunge it into boiling water —the result is the same. Finally, Dr. Koch advises that the apartments in which cholera patients have died be left uninhabited for six days. On what does he base his opinion that the danger does not exist on the seventh day? This is entering into the domain of superstition. —*Gaz. Méd. de Paris.*

YELLOW FEVER.—The Consul at Guaymas, Mexico, reports to the Secretary of State that "the report of yellow fever at this port during the month has been greatly exaggerated. There is no doubt but what there

is a malignant type of malarial bilious fever; during the month eleven deaths are reported from this disease, which is called by some yellow fever. No foreigners have, as yet, died from it in the month. The port authorities still give clean bills of health to all vessels departing."

At Havana the yellow fever is slightly on the increase, with a reported mortality of twenty-three for the week ending July 26.

THE S. D. GROSS PROFESSORSHIP OF PATHOLOGICAL ANATOMY.—Dr. Richard J. Dunglison, Treasurer, Lock Box 1274, Philadelphia, acknowledges the following additional contributions to this fund:

W. L. Conyngham, Esq., Wilkes Barre,	$200
Dr. N. Bozeman, New York,	100
Dr. Wm. Pepper, Philadelphia,	100
Henry C. Lea, Esq., Philadelphia,	100
Dr. Frank Woodbury, Philadelphia,	50
Dr. C. Ernest Kamerly, Philadelphia,	25
Dr. James Graham, Philadelphia,	25
Dr. Hunter McGuire, Richmond, Va.,	25
Dr. D. W. Cheever, Boston,	20
Persifor Frazer, Esq., Philadelphia,	20
Dr. B. A. Watson, Jersey City, N. J.,	20
Dr. John Graham, Philadelphia,	20
Dr. Wm. Ashbridge, Philadelphia,	10
Dr. Horatio R. Bigelow, Washington, D.C.,	5

JEFFERSON MEDICAL COLLEGE.—DR. ROBERT E. ROGERS, Professor of Medical Chemistry and Toxicology in this institution, has just tendered his resignation of the Chair, to which he was elected in 1877.

AMERICAN PUBLIC HEALTH ASSOCIATION.—The twelfth annual session of this Association will be held at St. Louis on October 14–17, 1884, under the Presidency of Albert L. Gihon, M.D., U. S. A.

THE BRITISH MEDICAL ASSOCIATION.—The annual meeting of this Association was held at Belfast, beginning on Tuesday last, under the Presidency of Dr. James Cuming. Additional interest it was anticipated would be imparted to the proceedings by the presence of a number of distinguished foreigners, who had announced their intention to be present. From America, were expected Drs. Austin Flint, L. A. Sayre, and A. Jacobi, of New York; E. M. Moore, of Rochester, and S. J. Jones, of Chicago. From the Continent, Prof. Benedikt, of Vienna; Prof. Zehender, of Rostock; Dr. Cordes, of Geneva; Dr. Pozzi, of Paris; Prof. Gayet, of Lyons; Dr. Dujardin-Beaumetz, of Paris; Dr. Drummond, of Rome; and Dr. Grant Bey, of Cairo.

OBITUARY RECORD.—PROFESSOR E. JAEGER VON JAXTHAL. The Vienna journals announce the death of Prof. Jaeger, the celebrated oculist, at the age of sixty-six years. He took his degree of Doctor in Medicine in 1844. Until 1849 he served as surgeon in the Austrian Army, when he opened a private dispensary for the treatment of diseases of the eye. In 1853 he was appointed Privat-Docent for Ophthalmology in the University of Vienna, and was raised to the Adjunct Professorial Chair in 1857. In the same year he was appointed Ophthalmologist to the General Hospital, of which he remained chief ophthalmologist until his death. In 1883 he was appointed Professor in the University. Jaeger's scientific writings are known and read in every language, and his test-types are used by almost every ophthalmologist in the world. He was an original thinker, and a skilful operator.

——M. BOUISSON, the eminent surgeon of Montpellier, has recently died. He was at one time a military surgeon, and contributed largely to the scientific movement of 1840–1860. He was born in 1813, and finished his medical studies in 1836; was appointed Professor of Physiology in Strasburg in 1837, to that of External Pathology in Montpellier in 1840, and to that of Clinical Surgery in 1851. In 1859 he took the Chair of Operative Medicine, which he held until his death.

——M. LETIÉVANT, Surgeon-Major of l'Hôtel-Dieu, in Lyons, and Adjunct Professor to the Faculté de Médecine, whose death is just announced, was a surgeon of great merit, and was well known by his writings, his principal work being on *Nerve Sections*. He was the first surgeon in Lyons to use the antiseptic method.

NOTES AND QUERIES.

BIDDING FOR STUDENTS.

To the Editor of THE MEDICAL NEWS.

SIR: In your issue of July 19, under the head of "Bidding for Students," you comment editorially on the "practice of a Baltimore medical college," to which your attention has been several times called. The Faculty of Physic of the University of Maryland has been "a Baltimore medical college" for more than three-quarters of a century, but up to the present time has not found it necessary to resort to the practices you so very properly condemn in order to fill its lecture-halls; nor is it likely that your timely and appropriate remarks should seem aimed at the University by any one familiar with its history or acquainted with its Faculty. Nevertheless, for the credit of the University among those at a distance, and in the interest of simple justice, we beg leave to say that we are not guilty of the practices animadverted upon by you in your editorial of July 19, and that we do not aim to increase the incumbrances of a "country overrun with half-educated doctors who are a reproach to the profession, and a danger to the community." I have the honor to be,

Sincerely yours,

J. EDWIN MICHAEL, M.D.,
Chairman of the Pub. Com.,
University of Maryland Medical School.

BALTIMORE, July 19, 1884.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM JULY 22 TO JULY 28, 1884.

WRIGHT, J. P., *Major and Surgeon.*—Granted leave of absence for one month, on surgeon's certificate of disability.—*Par. 3, S. O. 89, Headquarters Department of Texas*, July 17, 1884.

MCELDEREY, HENRY, *Captain and Assistant Surgeon.*—So much of Par. 12, S. O. 165, A. G. O., July 16, 1884, as assigned him to duty in Department of the East, is revoked, and he is ordered to report in person to the Surgeon-General of the Army for duty in connection with World's Industrial and Cotton Centennial Exposition, at New Orleans, La.—*Par. 12, S. O. 173, A. G. O.*, July 25, 1884.

FINLEY, J. A., *Captain and Assistant Surgeon.*—Granted leave of absence for one month, with permission to apply for one month extension; to take effect about September 1, 1884.—*Par. 2, S. O. 91, Headquarters Department of Texas* July 22, 1884.

REED, WALTER, *Captain and Assistant Surgeon.*—Relieved from duty at Fort Sidney, Nebraska, and ordered for duty as Post Surgeon at Fort Robinson, Nebraska, relieving Assistant Surgeon Henry McElderey, U. S. A.—*Par. 2, S. O. 62, Headquarters Department of the Platte*, July 22, 1884.

BENHAM, R. B., *First Lieutenant and Assistant Surgeon.*—Assigned to duty at Fort Brown, Texas.—*Par. 1, S. O. 90, Headquarters Department of Texas*, July 19, 1884.